

Hit#	p-value	gi number	db	protein accession	Name	Species	Crosshits [subfamily (p-value)]	Active Site Signature
1	6.79E-14	121605134	ref	YP_982463.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Polaromonas naphthalenivorans</i> C.12		FFYPKDNTPGCTTEAMGvsrdSHDEFKSKLEvkglrs
2	120594103	ABM37542.1	ref	ABM37542.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Polaromonas naphthalenivorans</i> C.2		FFYPKDNTPGCTTEAMGvsrdSHDEFKSKLEvkglrs
3	6.23E-15	197748012	ref	YP_002169645.1	hypothetical protein sq_495	<i>Aquifex aeolicus</i> VF5		FFYPKDNTPGCTTEAMGvsrdSHDEFKSKLEvkglrs
4	8.30E-11	151572839	gb	EDN38493.1	hypothetical protein FTDG_01310	<i>Francisella tularensis</i> subsp. novicida GA99-3548		SLSDFKGGKNNYpkmipgctgsglGISPdydgihri
5	1.80E-12	33640732	emb	CAE21187.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Loktanella vestfoldensis</i> SKA53		FFYPKDDITPGCTTEAGvsrkdHAKFVAKHDVmgiera
6	0	375183338	sp	Q75S15.1	PRXQ_GENTR RecName: Full=Peroxidoredoxin Q, chloroplastic; Atkna peroxidoredoxin Q	<i>Gentiana triflora</i>		FFYPKDDITPGCTTEAGvsrkdHAKFVAKHDVmgiera
7	1.36E-11	113868245	ref	YP_726734.1	bacterioferritin comigratory protein	<i>Ralstonia eutropha</i> H16		FFYPKDNTPGCTTEAMIsrdsrlsKLKLYGKEHlgkvp
8	2.75E-10	55376546	ref	YP_134398.1	monooxygenase	<i>Haloarcula marismortui</i> ATCC 43049		FFYPDFPSPVFNELCavsgdAHRAFAEEYGAvlids
9	9.31E-09	49475631	gb	AAV44692.1	monooxygenase	<i>Haloarcula marismortui</i> ATCC 43049		FFYPKDDITSGTNEALgvvllgikHEKFKIKHAKvsxs
10	1.32E-13	62424852	ref	XP_00379993.1	Bacterioferritin comigratory protein	<i>Bartonella henselae</i> str. Houston-1		FFYPKAAITPGCTTEACGvspsdALQAFITDQOfeqlrs
11	0	194432150	ref	XP_03064439.1	peroxidoredoxin	<i>Brevibacterium linens</i> BL.2		FFYPKAITPGCTVQACGvsrkdLSRFKAEKELYdgihri
12	2.98E-17	196163945	ref	EDY58906.1	putative thiol peroxidase (bacterioferritin comigratory protein)	<i>Shigella dysenteriae</i> 1012		FFYPKDNTPGCTRQACGvsrkdSHQKFAEKHEIvaikaf
13	2.98E-17	213955725	gb	EE867031.1	antioxidant. AhpC/TSA family	<i>Clostridium difficile</i> QCD-23m63		FFYPKAAITPGCTTEAGvsrkdLSRFKAEKELYdgihri
14	0	85711712	ref	XP_01042769.1	bacterioferritin comigratory protein	<i>Protonibacterium acnes</i> SK137		FFYPKAAITPGCTTEAGvsrkdLSRFKAEKELYdgihri
15	2.30E-13	19778157	ref	YP_002204357.1	bacterioferritin comigratory protein	<i>Idiomarina ballica</i> OS145		FFYPKAAITPGCTTEAGvsrkdLSRFKAEKELYdgihri
16	7.07E-12	196183869	gb	EDX78847.1	bacterioferritin comigratory protein	<i>Streptomyces siveus</i> ATCC 29083		FFYPKDDITGCTREAGvsrkdHDFKAKKYDmgiera
17	1.67E-11	169232640	ref	YP_001689680.1	peroxidoredoxin-like protein	<i>Streptomyces siveus</i> ATCC 29083		ALAADNRAlfyrdfrspvcateicGISFPdneatdeya
18	0	126694529	ref	ABO16714.1	putative bacterioferritin comigratory (BCP) protein	<i>Brevimonas</i> sp. BAL.3		FFYPKDNTPGCTKEACGvsrkdSHQKFAEKHEIvaikaf
19	1.84E-11	71032919	ref	XP_765751.1	hypothetical protein	<i>Halobacterium salinarum</i> R1		LVGKTLsifpsagbdkqacNHAKFKDKGKysktd
20	0	59712527	ref	YP_205303.1	thioredoxin-dependent thiol peroxidase	<i>Vibrio fischeri</i> ES114		FFYPKAMITPGCTVQACGvsrkdRKGKFIERNVdgihri
21	0	213014400	ref	XP_03330357.1	thiol peroxidase, thioredoxin-dependent	<i>Vibrio fischeri</i> MU11		FFYPKDNTPGCTLEAGvsrkdSHMNF AKKLNlyglrs
22	1.23E-14	66824945	ref	XP_645827.1	AhpC/TSA family protein	<i>Thermotogales bacterium</i> TBF_19.5.1		KYGNIAPIyppkdnspvcckscGVSsdshshsvksys
23	2.22E-16	42830553	ref	YP_00156092.1	COG1225: Peroxidoredoxin	<i>Dicyostelium discoideum</i> AX4		FFYPKALTPGCTTQACGvsrkdLQAFIEKKEYdgihri
24	2.52E-13	218259593	ref	XP_03475283.1	hypothetical protein PRABACTJOHN_00942	<i>Haemophilus influenzae</i> Pflri		FKGKLAlyppkdnstgataeacGVSkdshrgflakqre
25	2.53E-16	145632497	ref	XP_01788231.1	exonuclease ABC subunit A	<i>Haemophilus influenzae</i> 3655		FFYPKALTPGCTTQACGvsrkdLQAFIEKKEYdgihri
26	1.72E-15	68535573	ref	YP_250278.1	bacterioferritin comigratory protein	<i>Haemophilus influenzae</i> 3655		FFYPKADITPGCTTEACGvsrkdLEKFRDRKYEvglvrs
27	3.66E-11	83719703	ref	YP_443382.1	bcnp, putative	<i>Corynebacterium jeikeium</i> K411		FFYPAAAFITGCTIEA-HvsrkdLPAISKANRwaashmq
28	0	160879714	ref	YP_00155682.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Burkholderia thailandensis</i> E264		FLGKKVlyppkdnspgataeacGVSkdshshshsvksys
29	1.46E-16	70607936	ref	YP_256806.1	hypothetical protein SacI_2227	<i>Clostridium phytofermentans</i> ISDg		FFYPKDDITPGCTTEACGvsrkdSHKFKOKYNIparif
30	0	124008121	ref	XP_01692819.1	bacterioferritin comigratory protein	<i>Sulfolobus acidocaldarius</i> DSM 639		FFYPKDFITPGCTTEACGvsrkdTHLKFKEKHNVyskr
31	3.88E-11	161524582	ref	YP_001579594.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Microscilla marina</i> ATCC 23134		FFYPKDNTPGCTTEGLGvsrkdSHDNFKAKLEvlgiers
32	8.94E-10	189334684	dbi	BAQ43754.1	anti-oxidant AhpC/TSA family protein	<i>Burkholderia multivorans</i> ATCC 17616		AFYPADFSPVCTSEMRgissrdHQAFAEQLKlgitra
33	1.01E-13	121607676	ref	YP_995783.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Synechococcus</i> sp. JA-2-3B(a)(2:13)		FFYPKDNTPGCTTEAMGvsrdSHDDDFKLEKLEvkglrs

34	12.1552616	gb	ABM56765.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Vermineprohacter eisenaiae EF01-2	VFYPKAMTPTGCTVQACnleiflkskkvGISPDYjgwt
0	2.1672381	ref	NP_660448.1	thioredoxin-dependent thiol peroxidase	Buchnera aphidicola	
0	2.8564216	sp	O8274F0.2	BCP_BUCAP RecName: Full=Putative peroxiredoxin bcp. AINName: Buchnera aphidicola str. Sg.(Schizaphis graminum)		
0	2.1622987	gb	AA067659.1	bacterioferritin comigratory protein	Buchnera aphidicola str. Sg.(Schizaphis graminum)	
2.99E-12	162453368	ref	YP_001617763.1	bacterioferritin comigratory protein	Sorangium cellulosum 'So ce 56'	YFYPKDDTTPGCTTREAQgvsrdRHRKFRDKYDvngllrs
2.68E-12	72382566	emb	CAN91273.1	bacterioferritin comigratory protein	Sorangium cellulosum 'So ce 56'	
0	2002416	ref	YP_291921.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. NATL2A	OKGNIRTFYyPKddlpggdlleacGISNGSfglankk
7.21E-11	194090058	ref	YP_002001106.1	putative bacterioferritin comigratory protein	Neisseria gonorrhoeae NCCP11945	SSSGayfypkdstpgctegVVVGISRDklkkykkes
0	152991909	ref	YP_001357630.1	Bacterioferritin comigratory protein	Neisseria gonorrhoeae NCCP11945	YFYPKDNTPTGCTTEACgvsrdKRRNFIEKDKYmgvrs
0	151423770	tbl	BAF71273.1	peroxiredoxin family protein	Sulfurovum sp. NBC37-1	YFYPKDSTPTGCTNETAgjstsdSHENFKAKLAvnglers
1.92E-11	56478251	ref	YP_159840.1	putative peroxiredoxin	Azoarcus sp. EBN1	YFYPKAMTPTGCTVQACgijstskL_SRFSAEKEL_ydghlri
0	206578910	ref	YP_002237182.1	putative peroxiredoxin	Azoarcus sp. EBN1	
0	206564968	gb	ACI06744.1	putative peroxiredoxin	Klebsiella pneumoniae 342	
3.20E-12	68075121	ref	XP_679477.1	merozoit caping protein 1	Klebsiella pneumoniae 342	TLKAEIEKNTfypkantpgcteqakGLSADddkllrs
0	163784458	ref	CA04364.1	merozoit caping protein 1, putative	Plasmodium berghei strain ANKA	
0	159802273	gb	EDP73901.1	hypothetical protein HG1285_09506	Hydrogenivirga sp. 128-5-R1-1	YFYPKDNTPTGCTTEACgvsrdSHKFKREKYNvgvirs
2.01E-16	145637148	ref	YP_01792810.1	hypothetical protein HG1285_09506	Hydrogenivirga sp. 128-5-R1-1	
2.39E-13	15605946	ref	NP_213323.1	bacterioferritin comigratory protein	Haemophilus influenzae PIrHH	YFYPKALTPGCTTQACgjspkKLAQIEKKE_ydghlri
0	33866694	ref	NP_888253.1	bacterioferritin comigratory protein	Haemophilus influenzae PIrHH	LVLGLAyfypkadtggctqakGISTDkrrfrkfyg
0	33633472	emb	CAE08677.1	putative bacterioferritin comigratory (BCP) protein	Aquifex aeolicus VF5	DPAPDF_SyfyPKdtdtggctkeacGISKDShtkfkshke
1.07E-10	121683458	ref	YP_974793.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. WH 8102	
0	50812202	ref	YP_054574.1	hypothetical protein NMC0704	Synechococcus sp. WH 8102	AAAVVypkdsjsgctteqVVVGISRDklkkykkes
0	32468719	emb	CAB12700.2	hypothetical protein	Neisseria meningitidis FAMT8	YFYPKDNTPTGCTTEACgvsrdKHKFKREKHNynglers
3.22E-12	170781115	ref	YP_001709447.1	putative peroxidase	Bacillus subtilis subsp. subtilis str. 168	RFYPAAGTPTGCTTQACgjskcdLARFRFEGG_ygvirs
0	169159683	emb	CAQ00803.1	putative peroxidase	Clavibacter michiganensis subsp. sepedonicus	YFYPKAMTPTGCTVQACgjskcdLARFRFEGG_ygvirs
0	157371748	ref	YP_001479737.1	thioredoxin-dependent thiol peroxidase	Serratia proteamaculans 568	YFYPKAMTPTGCTVQACgjskcdLARFRFEGG_ygvirs
2.35E-13	54729832	gb	ABV42609.1	Peroxiredoxin	Serratia proteamaculans 568	YFYPKADATPGCTTEGOGjlsrdSHQFKSKONvgiers
0	53752617	emb	CAH14052.1	hypothetical protein pp2899	Legionella pneumophila str. Paris	YFYPKADATPGCTTEGOGjlsrdSHQFKSKONvgiers
0	18548006	ref	YP_002361877.1	hypothetical protein	Legionella pneumophila str. Paris	YFYPKAMTPTGCTVQACgjskcdLARFRFEGG_ydghlri
1.89E-13	218955627	emb	CA_Q88238.1	thiol peroxidase, thioredoxin-dependent	Escherichia ferugsonii ATCC 35469	YFYPKAMTPTGCTVQACgjskcdLARFRFEGG_ydghlri
7.85E-14	14600438	ref	NP_146952.1	peroxiredoxin Q	Escherichia ferugsonii	VLSTFKELLYfypmfsgrckkacGISPDkklrirk
2.32E-13	170743973	ref	YP_001772568.1	thiol peroxidase	Bacillus cereus AH187	YFYPRAMTPTGCTREGYgvsrdKRRFAEKHGegnlra
0	168191817	gb	ACA20134.1	thiol peroxidase	Aeropyrum permix K1	YFYPKDDTTSGLTEAKGvsrdSHQFKREKYGVlfdri
0	152967700	ref	YP_001363484.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylobacterium sp. 4-46	RLSPGyfyPaamtggcttqacVVGISRDklkfaerdg
1.70E-14	191119019	ref	NP_595117.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylobacterium sp. 4-46	LAAKIANfaypkasjsgctkqacQAKFKDKQONvsrd
0	74676210	sp	O94561.1	PRX_SCHPO RecName: Full=Peroxiredoxin C1773_02; AINName: F1	Schizosaccharomyces pombe	
0	3850080	emb	CAA21907.1	thioredoxin peroxidase	Schizosaccharomyces pombe	
0	161344743	gb	ABX64442.1	hypothetical protein	Schizosaccharomyces pombe	
0	168010694	ref	XP_001758039.1	predicted protein	Physcomitrella patens subsp. patens	YFYPADFTPTCTKQACgvsadLHKQFKARYRypgntly
0	162690916	gb	ED077281.1	predicted protein	Physcomitrella patens subsp. patens	YFYPAALTPGCTKQACgvsrdKLAQIEKKE_ygvirs
0	197332127	ref	YP_03174193.1	bacterioferritin comigratory protein	Streptomyces sp. Mq1	YFYPAALTPGCTKQACgvsrdKLAQIEKKE_ygvirs
0	197755752	ref	YP_002179028.1	bacterioferritin comigratory protein	Streptomyces sp. Mq1	
0	194344608	gb	EDX25574.1	bacterioferritin comigratory protein	Streptomyces sp. Mq1	LKGGKAFfypkdfjggckkacGISGDSnskfdryk
0	120436706	ref	YP_862392.1	bacterioferritin comigratory protein	Gramella forsetii KT0803	
0	117578856	emb	CAL67325.1	peroxiredoxin	Gramella forsetii KT0803	YFGISGyfyPKdtdtggctaeisGMSDPdchdkfkkhr
1.03E-09	167361481	ref	YP_0229604.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhizobium leguminosarum bv. trifolii WSM1325	LPGTGGAltsalagqgvFFYPRDDTPGCTKESlgisk
0	167071661	gb	EDR75557.1	bacterioferritin comigratory protein	Rhizobium leguminosarum bv. trifolii WSM1325	
8.86E-09	163731389	ref	YP_02138816.1	bacterioferritin comigratory protein	Roseobacter littoralis Och 149	YFYPKDNTPTGCTTEACgjsrdRHKFKREKYGymgiers
0	16394823	gb	EDQ19145.1	bacterioferritin comigratory protein	Roseobacter littoralis Och 149	
0	89100182	ref	YP_01173050.1	bacterioferritin comigratory protein	Bacillus sp. NRRL B-14911	YFYPKDNTPTGCTTEACgjsrdRHKFKREKYGymgiers
3.95E-16	89085148	gb	EAR64281.1	bacterioferritin comigratory protein	Bacillus sp. NRRL B-14911	
0	89462740	ref	YP_03011525.1	hypothetical protein BACCOP_03437	Bacteroides coprocola DSM 17136	YFYPKDNTPTGCTVQACgjskcdLARFRFEGG_ydghlri
0	183993938	ref	YP_02960891.1	hypothetical protein BACCOP_03437	Bacteroides coprocola DSM 17136	
0	18021640	gb	EDU59680.1	hypothetical protein PROSTU_02871	Providencia stuartii ATCC 25827	YFYPKAMTPTGCTVQACgjskcdLARFRFEGG_ydghlri
2.08E-09	86357877	ref	YP_489769.1	hypothetical protein PROSTU_02871	Providencia stuartii ATCC 25827	YFYPKAMTPTGCTVQACgjskcdLARFRFEGG_ydghlri
0	86281979	gb	ABC91042.1	bacterioferritin comigratory protein	Rhizobium etli CFN 42	YFYPKAMTPTGCTVQACgjskcdLARFRFEGG_ydghlri
0	21398967	ref	YP_0337812.1	AtpC/Tsa family protein	Pseudomonas syringae pv. tomato T1	ELSAFKQQQYfypkntpgctggcGVSRSdygvirs
7.84E-11	21392545	gb	EEB59045.1	AtpC/Tsa family protein	Pseudomonas syringae pv. tomato T1	

67	0	196246037.ref	ZP_03144758.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 8802	CL.TLFSSSFlyfypkdfbtpcgtleakGVSDipaihsa
		218245971.ref	YP_002371342.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 8801	
		19620811.gb	EDV0909.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 8802	
		218166449.gb	ACK665186.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 8801	
68	4.39E-14	86750119.ref	YP_486615.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodospseudomonas palustris HaA2	SLKTPAAKSAfyprrantpgctkealGVSADefqrs
		66573147.gb	ABD07704.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodospseudomonas palustris HaA2	
70	1.58E-17	67923590.ref	ZP_00518739.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Crocospaera watsoni WH 8501	YFYPKDNITPGCTTTEAGgspisvSHGKFDIKRYDmgjirs
		67852764.gb	EAM48174.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Crocospaera watsoni WH 8501	
71	1.12E-12	146417823.ref	XP_001484879.1	hypothetical protein FGUG_02608	Pichia guilliermondii ATCC 6280	FAYPKASTPGCTROVcgjssaaQAKNFITKQSpjgkirs
72	4.22E-15	124002419.ref	YP_01687272.1	bacterioferritin comigratory protein	Microscilla marina ATCC 23134	YFYPKDNITKGGTAQAAGcvskdSHQKFDIKFEEegiltid
		16976144.gb	ACR74457.1	bacterioferritin comigratory protein	Microscilla marina ATCC 23134	
73	0	22299741.ref	NP_681988.1	bacterioferritin comigratory protein	Thermosynechococcus elongatus BP-1	YFYPKDDITPGCTKEACgvsedSHQKFTAKFNlaodvirs
		22294922.dbl	BAC008750.1	bacterioferritin comigratory protein	Thermosynechococcus elongatus BP-1	
74	7.71E-11	470723138.ref	YP_001750826.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas putida W619	YFYPKDSITPGCTTEGGovsrdSHENFNKAKQAkdvtrq
		16976144.gb	ACR74457.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas putida W619	
75	0	16081486.ref	NP_393836.1	thiol-specific antioxidant related protein	Thermoplasma acidophilum DSM 1728	NVGDIAFyhpklpbgctteacGVSDshkfaelyln
		10639529.emb	CAC11501.1	thiol-specific antioxidant related protein	Thermoplasma acidophilum	
76	7.11E-14	73662239.ref	YP_301020.1	putative peroxiredoxin	Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	YFYPDRNITPTCTTEACgsgidKHQNFSDKLDamgvt
		72494754.dbl	BAE18075.1	putative peroxiredoxin	Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	
77	1.25E-14	66828545.ref	XP_647626.1	AlpC/TSA family protein	Dicyostelium discoideum AX4	YFYPKDNSPVCTKESCGvssdSHKSFVSKYShkpljag
		60473614.gb	EAL73549.1	AlpC/TSA family protein	Dicyostelium discoideum AX4	
78	3.22E-12	149245920.ref	XP_001527430.1	conserved hypothetical protein	Lodderomyces elongisporus NRRL YB-4233	RVA SRSSiSfeypkastpgctqvccGLSADnIkkaeaaet
		146449824.gb	EDK44080.1	conserved hypothetical protein	Lodderomyces elongisporus NRRL YB-4233	
79	1.45E-11	67200329.ref	YP_497586.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Novosphingobium aromaticivorans DSM 12444	ILSAPASAEELagkpsfYYPKAFQTGGCTLEAHeasad
		87113801.gb	ABD26749.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Novosphingobium aromaticivorans DSM 12444	
80	0	22128315.ref	NP_668738.1	thioredoxin-dependent thiol peroxidase	Yersinia pestis KIM1	YFYPKAMITPGCTVQAAGjstskLSRFAEKELyngfhr
		45442460.ref	NP_993999.1	thioredoxin-dependent thiol peroxidase	Yersinia pestis biovar Microtus str. 91001	
		21958193.gb	AAAM84989.1	AEO13745.1 bacterioferritin comigratory protein	Yersinia pestis KIM	
81	8.80E-14	211961628.gb	EEA96823.1	bacterioferritin comigratory protein	Yersinia pestis biovar Microtus str. 91001	YFYPKDDITPGCTKEAlgispdkHDKFKAKHGymoyers
82	0	118462347.ref	YP_882361.1	antioxidant, AlpC/TSA family protein	Pseudovibrio sp. JEO62	FFYPAAITPGCTKEACgavgnvKQAKFAELOKYdid
		118163634.gb	ABK64531.1	antioxidant, AlpC/TSA family protein	Mycobacterium avium 104	
83	0	212212600.ref	YP_002303536.1	thioredoxin peroxidase	Mycobacterium avium 104	LKGGKKVlyhpkkdtpgdkeacGISKDahtqsfkqyn
		212011010.gb	ACJ1839.1	thioredoxin peroxidase	Coxiella burnetii CbuG_Q212	YFYPKAMITPGCIVQAOAEgvsidrLPNFIEKKSydglnri
84	8.85E-13	148979871.ref	ZP_01815749.1	thioredoxin-dependent thiol peroxidase	Vibrionales bacterium SWA1-3	
		145961563.gb	EDK26864.1	thioredoxin-dependent thiol peroxidase	Vibrionales bacterium SWA1-3	
85	2.36E-13	67828190.ref	XP_661905.1	hypothetical protein AN4301.2	Aspergillus nidulans FGSC A4	SAKRTRTKVfhytpkaspbgdkqagGLSADkagklll
		40740985.gb	EAA60041.1	hypothetical protein AN4301.2	Aspergillus nidulans FGSC A4	
86	2.53E-14	66814524.ref	YP_641444.1	AlpC/TSA family protein	KGDKLVSlyfypkdtelsickeacGVSRSDshskfrfskys	
		60469465.gb	EAL67458.1	AlpC/TSA family protein	Dicyostelium discoideum AX4	
87	8.79E-17	145219948.ref	YP_001130657.1	redoxin domain-containing protein	Prosthecochloris vibriiformis DSM 265	OHGKSVSYfypkdfbtpgdtaeacGVSDtkhrrkdaids
		145208112.gb	ABP37155.1	redoxin domain-containing protein	Chlorobium phaeovibrioideus DSM 265	YFYPKDNITPGCTSESQjpsdSHKFIQKYHyegjirs
88	1.13E-15	57905541.ref	ZP_00371468.1	bacterioferritin comigratory protein	Campylobacter upsaliensis RM3795	QKGNIRTFyppkddtpgdlevcGINSgshgntnknk
		57016088.gb	EAL52875.1	bacterioferritin comigratory protein	Prochlorococcus marinus str. NATL1A	
89	1.88E-10	124026271.ref	YP_001015387.1	peroxiredoxin	Prochlorococcus marinus str. NATL1A	QKGNIRTFyppkddtpgdlevcGINSgshgntnknk
		123961339.gb	ABM76122.1	peroxiredoxin	Prochlorococcus marinus str. NATL1A	AFPPGAFTSVCITKEMCgjeavdSLAEFAKQNNlqasks
90	3.31E-13	48478320.ref	YP_024026.1	putative peroxiredoxin	Prochlorococcus marinus str. DSM 9790	
		48430968.gb	AA143633.1	putative peroxiredoxin	Prochlorococcus marinus str. DSM 9790	
91	7.80E-10	146306692.ref	YP_001187157.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas mendocina ymp	YFYPKDAITPGCTTTEGMgvsmdkHESFKCKQIEymgijvs
		145574893.gb	ABP84425.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas mendocina ymp	
92	1.82E-09	33240382.ref	NP_875324.1	peroxiredoxin	Prochlorococcus marinus subsp. marinus str. CCMP1375	YFYPEDATSGCTIEAKgskdSHKLF.CSDDQKpngily
		33237909.gb	AAP98976.1	peroxiredoxin	Prochlorococcus marinus subsp. marinus str. CCMP1375	
93	0	157412431.ref	YP_001483297.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. MIT 9215	YFYPKDNITPGCTKEACgjskshQKFIKFKHeghiek
		157387006.gb	ABV49711.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. MIT 9215	
94	0	124026271.ref	YP_001013973.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. NATL1A	YFYPKDDITPGCTKEACgjskshQKFIKFKHkygknel
		123959925.gb	ABM74708.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. NATL1A	
95	7.48E-11	15643152.ref	NP_228198.1	bacterioferritin comigratory protein	Thermotoga maritima MSB8	ELLTDfppkagsgcreavVVGISRDaikrfkeind
		170288830.ref	YP_001738588.1	nitroreductase	Thermotoga sp. RQ2	
		4980889.gb	AA035471.1	AE001718_8 bacterioferritin comigratory protein/NADH dehydrogenase	Thermotoga maritima MSB8	
		170175853.gb	ACG080905.1	nitroreductase	Thermotoga sp. RQ2	
96	4.86E-15	90424345.ref	YP_532715.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodospseudomonas palustris BisB18	FFYPRASITPGCTKEAlgsaadAQDAFRDKYQmyqkllq
		901063395.gb	AB088396.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodospseudomonas palustris BisB18	
97	4.89E-09	187923567.ref	YP_001695209.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia phytofirmans Ps.JN	MKKKFSIVALtasaiyYYPAAFTKGGCTIEAHgvsd
		187714761.gb	ACD15985.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia phytofirmans Ps.JN	
98	0	153855491.ref	ZP_01994871.1	hypothetical protein DORLON_00860	Dorea longicalena DSM 13814	YFYPKDNITPGCTKQASgvsdSHKFRFEKYGeqjllik
		149753646.gb	EDM63577.1	hypothetical protein DORLON_00860	Dorea longicalena DSM 13814	
99	0	15644766.ref	NP_206936.1	bacterioferritin comigratory protein (bcp)	Helicobacter pylori 26695	YFYPKDNITPGCTLEAKgispdSHQKFSQCSNhgirs
		24994781.sp	P55979.1	BCP_HELPY ReclName: Full=Putative peroxiredoxin bcp. AliName: F	Helicobacter pylori 26695	
		2313221.gb	AA007205.1	bacterioferritin comigratory protein (bcp)	Helicobacter pylori 26695	
100	0	123867629.ref	YP_001008487.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. AS9601	YFYPKDNITPGCTKEACgjskshQKFRFEKFNkvaai
		123197739.gb	ABM69380.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. AS9601	

101	0	28550433.gb	AA053197.1	similar to Anabaena sp. (strain PCC 7120). Bacterioferritin comigratory	Dicystostelium discoideum	SLKDFADKVLvfyppkdstpqcikcaecGVSSDilpgrs
102	1.31E-12	84684971.ref	ZP_01012877.1	probable bacterioferritin	Rhodobacteriales bacterium HTCC2654	TVSLDFlypkastpqcikcaecGVSSDilpgrs
103	0	84686732.gb	EA013782.1	probable bacterioferritin	Rhodobacteriales bacterium HTCC2654	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		51897101.ref	YP_071292.1	thioredoxin-dependent thiol peroxidase	Yersinia pseudotuberculosis IP-32953	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		170023602.ref	YP_001720107.1	peroxiredoxin	Yersinia pseudotuberculosis YPIII	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		186896193.ref	YP_001873305.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Yersinia pseudotuberculosis PB1/+	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		515903833.gb	CAH22023.1	bacterioferritin comigratory protein	Yersinia pseudotuberculosis YPIII	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		1697501356.gb	ACA617654.1	peroxiredoxin	Yersinia pseudotuberculosis YPIII	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
104	1.09E-11	186899219.gb	ACC839848.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Yersinia pseudotuberculosis PB1/+	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		42523292.ref	NP_968672.1	bacterioferritin comigratory protein	Bdellovibrio bacteriovorus HD100	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		39575497.emb	CAE196665.1	bacterioferritin comigratory protein	Bdellovibrio bacteriovorus HD100	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
105	3.15E-14	171914103.ref	ZP_02929573.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Verucomicrobium spinosum DSM 4136	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
106	0	15920951.ref	NP_376620.1	bacterioferritin comigratory protein	Sulfolobus tokodaii str. 7	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		15621735.dbj	BA865729.1	154aa long hypothetical bacterioferritin comigratory protein	Sulfolobus tokodaii str. 7	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
107	0	56751924.ref	YP_172825.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		81300989.ref	YP_401197.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		56686883.dbj	BA808105.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
108	1.58E-16	145635161.ref	ZP_01790866.1	exonuclease ABC subunit A	Synechococcus elongatus PCC 7942	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		145267582.gb	EDK07581.1	exonuclease ABC subunit A	Haemophilus influenzae PittAA	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
109	3.08E-10	111223837.ref	YP_714631.1	thioredoxin-dependent thiol peroxidase; bacterioferritin comigratory protein	Haemophilus influenzae PittAA	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		111151369.emb	CAJ63084.1	thioredoxin-dependent thiol peroxidase; bacterioferritin comigratory protein	Frankia alni ACN114a	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
110	2.76E-15	116070416.ref	ZP_01467685.1	putative bacterioferritin comigratory protein	Synechococcus sp. BL107	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		116065821.gb	EAUJ71578.1	putative bacterioferritin comigratory protein	Synechococcus sp. BL107	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
111	6.20E-17	52424319.ref	YP_087456.1	thioredoxin-dependent thiol peroxidase	Mammheimia succiniciproducens MBEL55E	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		52300371.gb	AAU36871.1	Bcp protein	Mammheimia succiniciproducens MBEL55E	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
112	0	50955460.ref	YP_082748.1	bacterioferritin comigratory-like protein	Leifsonia xyli subsp. xyli str. CTCB07	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		50951942.gb	AA1789643.1	bacterioferritin comigratory homolog	Leifsonia xyli subsp. xyli str. CTCB07	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
113	7.12E-13	66824951.ref	XP_645830.1	AhpC/TSA family protein	Dicystostelium discoideum AX4	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		60474043.gb	EAL71980.1	AhpC/TSA family protein	Dicystostelium discoideum AX4	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
114	8.87E-14	170076742.ref	YP_001733380.1	AhpC/TSA family protein	Synechococcus sp. PCC 7002	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		169884411.gb	ACA98124.1	AhpC/TSA family (bacterioferritin comigratory protein)	Synechococcus sp. PCC 7002	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
115	2.34E-12	170089117.ref	XP_001875781.1	peroxiredoxin Q	Synechococcus sp. S238N-H82	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		164649041.gb	EDR13283.1	peroxiredoxin Q	Synechococcus sp. S238N-H82	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
116	0	157342483.emb	CA065195.1	unnamed protein product	Vitis vinifera	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
117	1.74E-16	116323822.ref	YP_768592.1	peroxiredoxin	Leptospira borgpetersenii serovar Hardjo-bovis L550	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		116330522.ref	YP_800240.1	peroxiredoxin	Leptospira borgpetersenii serovar Hardjo-bovis JB197	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		116121616.gb	ABJ79659.1	peroxiredoxin	Leptospira borgpetersenii serovar Hardjo-bovis L550	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
118	0	108800020.ref	YP_640217.1	redoxin	Leptospira borgpetersenii serovar Hardjo-bovis JB197	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		119669145.ref	YP_939097.1	redoxin domain-containing protein	Mycobacterium sp. KMS	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		108770439.gb	ABG09161.1	Redoxin	Mycobacterium sp. KMS	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
119	1.53E-13	113953252.ref	YP_730767.1	bacterioferritin comigratory protein	Mycobacterium sp. KMS	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		1138800603.gb	ABI45561.1	bacterioferritin comigratory protein	Synechococcus sp. CC9311	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
120	2.51E-09	163868346.ref	YP_001609555.1	bacterioferritin comigratory protein	Synechococcus sp. CC9311	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		161018002.emb	CAK01560.1	bacterioferritin comigratory protein	Bartonella tribocorum CIP 105476	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
121	8.24E-11	5304987.ref	YP_113177.1	anti-oxidant AhpC/TSA family protein	Bartonella tribocorum CIP 105476	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		53758728.gb	AAU93019.1	antioxidant. AhpC/Tsa family	Methylococcus capsulatus str. Bath	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
122	5.24E-11	78047344.ref	YP_363519.1	AhpC/TSA family peroxiredoxin	Methylococcus capsulatus str. Bath	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		78035774.emb	CAJ23465.1	putative AhpC/TSA family peroxiredoxin	Xanthomonas campestris pv. vesicatoria str. 85-10	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
123	3.00E-11	170692302.ref	ZP_02883465.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthomonas campestris pv. vesicatoria str. 85-10	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		170142732.gb	EDT10897.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia graminis C4D1M	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
124	4.27E-12	124022787.ref	YP_00107094.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia graminis C4D1M	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		123963073.gb	ABM77829.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. MIT 9303	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
125	0	77977634.ref	ZP_008330077.1	peroxiredoxin	Prochlorococcus marinus str. MIT 9303	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
126	2.72E-16	111018030.ref	YP_701002.1	bacterioferritin comigratory protein	Yersinia intermedia ATCC 29909	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		1108175601.gb	ABG92844.1	bacterioferritin comigratory protein	Rhodococcus jostii RHA1	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
127	3.56E-10	56697091.ref	YP_167454.1	AhpC/TSA family protein	Rhodococcus jostii RHA1	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		56678828.gb	AAV95494.1	AhpC/TSA family protein	Silicibacter pomeroyi DSS-3	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
128	0	111016428.ref	YP_701400.1	bacterioferritin comigratory protein	Silicibacter pomeroyi DSS-3	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		110817958.gb	ABG93242.1	bacterioferritin comigratory protein	Rhodococcus jostii RHA1	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
129	3.35E-12	16082618.ref	NP_394824.1	peroxiredoxin	Rhodococcus jostii RHA1	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
130	2.04E-11	148242483.ref	YP_001227640.1	peroxiredoxin	Thermoplasma acidophilum DSM 1728	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		147850793.emb	CAK28287.1	peroxiredoxin	Synechococcus sp. RCC307	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
131	0	194701728.gb	ACF84948.1	unknown	Synechococcus sp. RCC307	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		195636398.gb	ACG37667.1	peroxiredoxin bcp	Zea mays	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
132	0	19825752.gb	EDY82060.1	antioxidant. AhpC/TSA family	Zea mays	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
133	4.79E-11	33597462.ref	NP_885105.1	putative bacterioferritin comigratory protein	Verucomicrobiae bacterium DG1235	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
		33573869.emb	CAE38204.1	putative bacterioferritin comigratory protein	Bordetella parapertussis	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri
134	1.68E-12	190346426.gb	EDK38510.2	hypothetical protein PGU6_02608	Pichia guilliermondii ATCC 6260	YFYPKAMTTPGCTVQACglsrskLSRFAEKELydgihri

135	4.33E-13	27379435	ref	NP_770964.1	bacterioferritin	Bradyrhizobium japonicum USDA 110	AAKAKKSKTRfrypradtpgcrealGISADlvgsgkg
136	1.58E-15	471914102	ref	BAC495489.1	bil4324	Bradyrhizobium japonicum USDA 110	LVAxyDAyypkadtbgtaqaccvGVSTdaqkkfektyn
137	0	91793089	ref	YP_562740.1	thioredoxin-dependent thiol peroxidase	Yerucromicrobium spinosum DSM 4136	YFYPKASTPGCTVQACgispqRRLKRFHDKQEVdghrl
138	0	91716091	gb	ABE55017.1	alkyl hydroperoxide reductase/ Thiol specific antioxi-dant/ Mai allergen	Shewanella denitrificans OS217	YFYPKAMTPGCTTQACgispqRRLVKFIEKHIDyeghhv
139	0	88798094	ref	YP_01113688.1	bacterioferritin comigratory protein	Reinekea sp. MED297	YFYPKAMTPGCTVQACgispqRKLRSRFEIEKVEydgihri
140	0	50120199	ref	YP_0493666.1	thioredoxin-dependent thiol peroxidase	Pedobacterium atrosepticum SCR11043	YFYPKASTPGCTVQACgispqRKLARFAQKQEVdghrl
141	0	163752414	ref	ZP_02159607.1	bacterioferritin comigratory protein	Pedobacterium atrosepticum SCR11043	YFYPKDDTTPGCTREAKGsgskdSHENFKKHKHNymgids
142	2.62E-14	49610725	emb	CAG74170.1	bacterioferritin comigratory protein	Shewanella benthica KT199	
143	0	16132711	gb	EDP98900.1	bacterioferritin comigratory protein	Shewanella benthica KT199	
144	0	57239216	ref	YP_180352.1	bacterioferritin comigratory protein	Ehrlichia ruminantium str. Welgevonden	
145	0	58579174	ref	YP_197386.1	bacterioferritin comigratory protein	Ehrlichia ruminantium str. Welgevonden	
146	0	57161235	emb	CAL458216.1	putative bacterioferritin comigratory protein	Ehrlichia ruminantium str. Welgevonden	
147	0	58417800	emb	CALZ7004.1	Bacterioferritin comigratory protein	Ehrlichia ruminantium str. Welgevonden	
148	0	58040094	ref	YP_192058.1	bacterioferritin comigratory protein	Glucobacter oxydans 621H	YFYPKADTPGCTTQACgispqRKLKIEKFAIKYGGsgihri
149	0	58002508	gb	AAV61402.1	Bacterioferritin comigratory protein	Glucobacter oxydans 621H	
150	0	157144587	ref	YP_001451906.1	thioredoxin-dependent thiol peroxidase	Citrobacter koseri ATCC BAA-895	YFYPKAMTPGCTVQACgispqRKLRSRFAEKLydgihri
151	0	157081792	gb	ABV11470.1	hypothetical protein CKO_00307	Citrobacter koseri ATCC BAA-895	
152	1.99E-12	83952641	ref	ZP_00961371.1	hypothetical protein	Roseovarius nubihhibens ISM	FFYPRDMTPGCTTEA TgiskdSHDRFVAKKEImglvrs
153	0	83835776	gb	EAAP75075.1	AtpC/TSA family protein	Roseovarius nubihhibens ISM	
154	2.22E-16	145628575	ref	ZP_01784375.1	excinuclease ABC subunit A	Haemophilus influenzae 22.1-21	YFYPKALTPGCTTQACgispqRKLQAFIEKKEydgihri
155	0	144979045	gb	EDJ88731.1	excinuclease ABC subunit A	Haemophilus influenzae 22.1-21	
156	0	116626747	ref	YP_828903.1	redoxin domain-containing protein	Solibacter ustulatus Ellim6076	YFYPKADTPGCTVEACgispqRSLQAKFKKEYDvmgivr
157	0	116229909	gb	AB_88618.1	Redoxin domain protein	Solibacter ustulatus Ellim6076	
158	0	15803003	ref	NP_289033.1	thioredoxin-dependent thiol peroxidase	Escherichia coli O157:H7 EDL_933	YFYPKAMTPGCTVQACgispqRKLRSRFAEKLydgihri
159	0	15832596	ref	NP_311369.1	thioredoxin-dependent thiol peroxidase	Escherichia coli O157:H7 str. Sakai	
160	0	16130405	ref	NP_416975.1	thiol peroxidase, thioredoxin-dependent	Escherichia coli str. K-12 substr. MG1655	
161	0	24113809	ref	NP_708319.1	thioredoxin-dependent thiol peroxidase	Shigella flexneri 2a str. 301	
162	0	26248850	ref	NP_754890.1	thioredoxin-dependent thiol peroxidase	Escherichia coli CF1073	
163	0	30633858	ref	NP_838029.1	thioredoxin-dependent thiol peroxidase	Shigella flexneri 2a str. 24571	
164	0	74313006	ref	YP_311425.1	thioredoxin-dependent thiol peroxidase	Shigella boydii S8046	
165	0	82544928	ref	YP_408875.1	thioredoxin-dependent thiol peroxidase	Shigella boydii S8227	
166	0	82777862	ref	YP_404211.1	thioredoxin-dependent thiol peroxidase	Shigella dysenteriae Sd197	
167	0	89109286	ref	AP_003066.1	thiol peroxidase, thioredoxin-dependent	Escherichia coli W3110	
168	0	91211812	ref	YP_541798.1	thioredoxin-dependent thiol peroxidase	Escherichia coli UT189	
169	0	110642684	ref	YP_670384.1	thioredoxin-dependent thiol peroxidase	Escherichia coli 536	
170	0	110806413	ref	YP_689933.1	thioredoxin-dependent thiol peroxidase	Shigella flexneri 5 str. 8401	
171	0	117624676	ref	YP_853589.1	thioredoxin-dependent thiol peroxidase	Escherichia coli APEC O1	
172	0	157159418	ref	YP_001463805.1	thioredoxin-dependent thiol peroxidase	Escherichia coli E24377A	
173	0	157161942	ref	YP_001459280.1	thioredoxin-dependent thiol peroxidase	Escherichia coli HS	
174	0	16874843	ref	ZP_02773488.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4113	
175	0	168756249	ref	ZP_02781256.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4401	
176	0	168761086	ref	ZP_02786093.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4501	
177	0	168768569	ref	ZP_02793576.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4486	
178	0	168773609	ref	ZP_027986116.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4196	
179	0	168778443	ref	ZP_02803450.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4076	
180	0	168787823	ref	ZP_02812830.1	peroxiredoxin	Escherichia coli O157:H7 str. EC889	
181	0	168798848	ref	ZP_02823855.1	peroxiredoxin	Escherichia coli O157:H7 str. EC508	
182	0	170019235	ref	YP_001724189.1	peroxiredoxin	Escherichia coli ATCC 8739	
183	0	170082090	ref	YP_001731410.1	thiol peroxidase, thioredoxin-dependent	Escherichia coli str. K12 substr. DH10B	
184	0	170767462	ref	ZP_02901915.1	peroxiredoxin	Escherichia coli SMS-3-5	
185	0	187733428	ref	YP_001881272.1	peroxiredoxin	Escherichia albertii TW07627	
186	0	18849304	ref	YP_03000311.1	peroxiredoxin	Shigella boydii CDC 3083-94	
187	0	191167641	ref	ZP_03029451.1	peroxiredoxin	Escherichia coli B7A	
188	0	191172905	ref	ZP_03034440.1	peroxiredoxin	Escherichia coli F11	
189	0	193064683	ref	ZP_03045771.1	peroxiredoxin	Escherichia coli E22	
190	0	193066831	ref	ZP_03049274.1	peroxiredoxin	Escherichia coli E110019	
191	0	194437707	ref	ZP_03069803.1	peroxiredoxin	Escherichia coli 101-1	
192	0	195936623	ref	ZP_03082005.1	thioredoxin-dependent thiol peroxidase	Escherichia coli O157:H7 str. EC4024	
193	0	208808520	ref	ZP_03250857.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4206	
194	0	208814215	ref	ZP_03255544.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4045	
195	0	208821885	ref	ZP_03262205.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4042	
196	0	20939765	ref	YP_002271949.1	peroxiredoxin	Escherichia coli O157:H7 str. EC4115	
197	0	209519955	ref	YP_002294039.1	bacterioferritin comigratory protein	Escherichia coli SET1	
198	0	215487784	ref	YP_002330215.1	thiol peroxidase, thioredoxin-dependent	Escherichia coli O127:H6 str. E2348/69	
199	0	217327242	ref	ZP_03443325.1	peroxiredoxin	Escherichia coli O157:H7 str. TW14588	
200	0	218555006	ref	YP_002387919.1	thiol peroxidase, thioredoxin-dependent	Escherichia coli IA1	
201	0	218559416	ref	YP_002392329.1	thiol peroxidase, thioredoxin-dependent	Escherichia coli S88	
202	0	218690607	ref	YP_002398819.1	thiol peroxidase, thioredoxin-dependent	Escherichia coli ED1a	

218696103	ref	YP_002403776.1	thiol peroxidase, thioredoxin-dependent	<i>Escherichia coli</i> 55989
218700938	ref	YP_002408567.1	thiol peroxidase, thioredoxin-dependent	<i>Escherichia coli</i> IA139
218703929	ref	YP_002413498.1	thiol peroxidase, thioredoxin-dependent	<i>Escherichia coli</i> UMN026
83286396	sp	P0AE54.1	BCP_EC057 RecName: Full=Putative peroxidoreductase bcp; AltName: F	<i>Escherichia coli</i> O157:H7
83286397	sp	P0AE53.1	BCP_EC016 RecName: Full=Putative peroxidoreductase bcp; AltName: F	<i>Escherichia coli</i> O6
83286398	sp	P0AE52.1	BCP_EC016 RecName: Full=Putative peroxidoreductase bcp; AltName: F	<i>Escherichia coli</i> (strain K12)
83286399	sp	P0AE55.1	BCP_SH1FL RecName: Full=Putative peroxidoreductase bcp; AltName: F	<i>Shigella flexneri</i>
12516862	gb	AA657590.1	AE005477_8 bacterioferritin comigratory protein	<i>Escherichia coli</i> O157:H7 EDL_933
26109256	gb	AA881458.1	AE016764_140 Bacterioferritin comigratory protein	<i>Escherichia coli</i> CFT073
1788825	gb	AA074533.1	thiol peroxidase, thioredoxin-dependent	<i>Escherichia coli</i> str. K-12 substr. MG1655
1799908	dbj	BAA116358.1	thiol peroxidase, thioredoxin-dependent	<i>Escherichia coli</i> str. K12 substr. W3110
2668495	gb	AA888562.1	bacterioferritin comigratory protein	<i>Escherichia coli</i>
13362812	dbj	BA836765.1	bacterioferritin comigratory protein	<i>Shigella flexneri</i> 2a str. 301
24052384	gb	AA44026.1	bacterioferritin comigratory protein	<i>Shigella flexneri</i> 2a str. 2457T
30042113	gb	AA817839.1	bacterioferritin comigratory protein	<i>Shigella sonnei</i> Ss046
73856483	gb	AA289190.1	bacterioferritin comigratory protein	<i>Shigella dysenteriae</i> Sd197
81242010	gb	ABB62720.1	bacterioferritin comigratory protein	<i>Shigella boydii</i> S0227
81246339	gb	ABB67047.1	bacterioferritin comigratory protein	<i>Escherichia coli</i> UT189
91073366	gb	ABE08267.1	thiol peroxidase	<i>Escherichia coli</i> 536
110344246	gb	ABG70483.1	bacterioferritin comigratory protein	<i>Shigella flexneri</i> 5 str. 8401
110615961	gb	ABF04628.1	bacterioferritin comigratory protein	<i>Escherichia coli</i> APEC O1
115513800	gb	ABJ01875.1	thioredoxin-dependent thiol peroxidase	<i>Escherichia coli</i> HS
157067622	gb	ABV06877.1	peroxidoreductin	<i>Escherichia coli</i> ATCC 8739
157081448	gb	ABV21156.1	peroxidoreductin	<i>Escherichia coli</i> str. K12 substr. DH108
169754163	gb	ACA76862.1	thiol peroxidase, thioredoxin-dependent	<i>Escherichia albertii</i> TW07627
16988925	gb	ACB06832.1	peroxidoreductin	<i>Escherichia coli</i> SMS-3-5
170123796	gb	EDS92727.1	peroxidoreductin	<i>Shigella boydii</i> CDC 3083-94
170519336	gb	ACB17514.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4196
187430420	gb	ACD09694.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4113
18770661	gb	EDL34505.1	peroxidoreductin	<i>Escherichia coli</i> 53638
188017083	gb	EDU55205.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4076
188488240	gb	EDU63343.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4401
189003376	gb	EDU72362.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4486
189356568	gb	EDU74987.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4801
189362322	gb	EDU8074.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC889
18968461	gb	EDU86877.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC508
18972300	gb	EDU90716.1	peroxidoreductin	<i>Escherichia coli</i> F11
18978960	gb	EDU96976.1	peroxidoreductin	<i>Escherichia coli</i> E22
190902321	gb	EDV62060.1	peroxidoreductin	<i>Escherichia coli</i> E110019
190906769	gb	EDV66373.1	peroxidoreductin	<i>Escherichia coli</i> 101-1
192927576	gb	EDV82192.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4206
192958283	gb	EDV88703.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4045
194423513	gb	EDX39504.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. EC4115
208726321	gb	EDZ77922.1	peroxidoreductin	<i>Escherichia coli</i> SE11
208735492	gb	EDZ84179.1	peroxidoreductin	<i>Escherichia coli</i> O127:H6 str. E2348/69
208742008	gb	EDZ89690.1	peroxidoreductin	<i>Escherichia coli</i> O157:H7 str. TW14588
209158165	gb	ACI95598.1	peroxidoreductin	<i>Escherichia coli</i>
209913214	dbj	BA678288.1	bacterioferritin comigratory protein	<i>Bacillus amyloliquefaciens</i> FZB42
215266866	emb	CAS10265.1	thiol peroxidase Bcp, thioredoxin-dependent	<i>Bacillus amyloliquefaciens</i> FZB42
217319609	gb	EEC28034.1	peroxidoreductin	<i>Bacillus amyloliquefaciens</i> FZB42
218352841	emb	CAU98635.1	thiol peroxidase, thioredoxin-dependent	<i>Thermoplasma volcanium</i> GSS1
218361774	emb	CAQ89371.1	thiol peroxidase, thioredoxin-dependent	<i>Anaplasma phagocytophilum</i> HZ
218366185	emb	CAR03931.1	thiol peroxidase, thioredoxin-dependent	<i>Anaplasma phagocytophilum</i> HZ
218570924	emb	CAR18743.1	thiol peroxidase, thioredoxin-dependent	<i>Salmonella enterica</i> subsp. enterica serovar Typhimurium LT2
218428171	emb	CAR09085.2	thiol peroxidase, thioredoxin-dependent	<i>Salmonella typhimurium</i> LT2
218433076	emb	CAR13971.1	thiol peroxidase, thioredoxin-dependent	<i>Salmonella enterica</i> subsp. enterica serovar Typh. str. CT18
148	0	154685335	ref	YP_001420496.1 YgaF
149	0	14324655	dbj	BA659562.1 bacterioferritin comigratory protein
150	1.91E-14	88601785	ref	YP_005372.1 anti-oxidant AhpC/TSA family protein
151	0	16761408	ref	NP_457025.1 antioxidant, AhpC/Tsa family
29140895	ref	NP_804237.1	thioredoxin-dependent thiol peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi B str. SPB7
62181056	ref	YP_217473.1	thioredoxin-dependent thiol peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi B str. SPB7
161902388	ref	YP_001569470.1	thioredoxin-dependent thiol peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Saimpaul str. SARA29
161612759	ref	YP_02343253.1	putative peroxidoreductin bcp	<i>Salmonella enterica</i> subsp. enterica serovar 4 [5] 12:i:- str. CVM23701
167991796	ref	ZP_02572895.1	putative peroxidoreductin bcp	<i>Salmonella enterica</i> subsp. enterica serovar Kentucky str. CDC 191
168232037	ref	ZP_02667095.1	putative peroxidoreductin bcp	<i>Salmonella enterica</i> subsp. enterica serovar Schwarzengrund str. SL 480
168238203	ref	ZP_02663261.1	peroxidoreductin Q. (Thioredoxinreductase)	<i>Salmonella enterica</i> subsp. enterica serovar Schwarzengrund str. SL 480

168243264	ref	ZP_02668196.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Heidelberg str. SL486
168261474	ref	ZP_026683447.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Hadar str. RI_05P066
168466766	ref	ZP_02700820.1	peroxiredoxin Q, (Thioredoxinreductase)	Saimonella enterica subsp. enterica serovar Newport str. SL317
168817788	ref	ZP_02829758.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Wellvedren str. HI_N05-537
19444441	ref	YP_002044750.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Newport str. SL254
194450382	ref	YP_002046554.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Newport str. SL254
19471649	ref	ZP_03077633.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Heidelberg str. SL476
194736256	ref	YP_002115554.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Kentucky str. CVM29188
197251774	ref	YP_002147442.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Schwarzengrund str. CVM19633
197264121	ref	YP_03164195.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Agona str. SL483
198243671	ref	YP_002216556.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Sainpaul str. SARA23
200386725	ref	ZP_03213337.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Dublin str. CT_02021853
204929474	ref	ZP_03220548.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Vichow str. SL491
207857902	ref	YP_002244563.1	hypothetical protein SEN2470	Saimonella enterica subsp. enterica serovar Javiana str. GA_MM04042433
213160895	ref	ZP_03346605.1	thioredoxin-dependent thiol peroxidase	Saimonella enterica subsp. enterica serovar Typhi str. P125109
213421017	ref	ZP_03354083.1	thioredoxin-dependent thiol peroxidase	Saimonella enterica subsp. enterica serovar Typhi str. E00-7866
213425355	ref	ZP_03358105.1	thioredoxin-dependent thiol peroxidase	Saimonella enterica subsp. enterica serovar Typhi str. E01-6750
213585729	ref	ZP_03367555.1	thioredoxin-dependent thiol peroxidase	Saimonella enterica subsp. enterica serovar Typhi str. E02-1180
213621141	ref	ZP_03373924.1	thioredoxin-dependent thiol peroxidase	Saimonella enterica subsp. enterica serovar Typhi str. E08-0664
213852466	ref	ZP_03381998.1	thioredoxin-dependent thiol peroxidase	Saimonella enterica subsp. enterica serovar Typhi str. E98-2068
214002878	ref	ZP_03413613.1	thioredoxin-dependent thiol peroxidase	Saimonella enterica subsp. enterica serovar Typhi str. M223
25319010	plr		AG0817 bacterioferritin comigratory protein - imported	Saimonella enterica subsp. enterica serovar Typhi str. E98-3139
16421033	gb	AA121385.1	thioredoxin dependent thiol peroxidase	Saimonella typhimurium LT2
16503708	emb	CA002691.1	bacterioferritin comigratory protein	Saimonella enterica subsp. enterica serovar Typhi
29138520	gb	AA068086.1	bacterioferritin comigratory protein	Saimonella enterica subsp. enterica serovar Typhi Ty2
62128689	gb	AA068392.1	thiol peroxidase; thioredoxin dependent	Saimonella enterica subsp. enterica serovar Choleraesuis str. SC-867
160963705	gb	ABX20328.1	hypothetical protein SARI_00391	Saimonella enterica subsp. arizonae serovar 62.24.223.--
161362123	gb	ABX65891.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Paratyphi B str. SPB7
194405074	gb	ACF63296.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Newport str. SL254
194408666	gb	ACF68905.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Heidelberg str. SL476
194458013	gb	EDX48852.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Kentucky str. CVM29188
194711758	gb	ACF90979.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Schwarzengrund str. CVM19633
195630836	gb	EDX49428.1	peroxiredoxin Q, (Thioredoxinreductase)	Saimonella enterica subsp. enterica serovar Newport str. SL317
197215471	gb	ACF52874.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Agona str. SL483
197242376	gb	EDV24936.1	peroxiredoxin Q	Saimonella enterica subsp. enterica serovar Sainpaul str. SARA23
197288941	gb	EDV28314.1	peroxiredoxin Q, (Thioredoxinreductase)	Saimonella enterica subsp. enterica serovar Schwarzengrund str. SL480
197938187	gb	ACH75520.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Dublin str. CT_02021853
199603823	gb	EDV202368.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Vichow str. SL491
204321193	gb	EDV206393.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Javiana str. GA_MM04042433
205325289	gb	EDJ13108.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Sainpaul str. SARA29
205329830	gb	EDJ16594.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar 4.15.12.i- str. CVM23701
205333549	gb	EDJ20313.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Kentucky str. CDC_191
205337624	gb	EDJ24398.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Heidelberg str. SL486
205344800	gb	EDJ231584.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Newport str. HI_N05-537
205349557	gb	EDZ36188.1	putative peroxiredoxin bcp	Saimonella enterica subsp. enterica serovar Hadar str. RI_05P066
206707075	emb	CA034055.1	conserved hypothetical protein	Saimonella enterica subsp. enterica serovar Enteritidis str. P125109
78778738	ref	YP_393850.1	putative bacterioferritin comigratory protein	QNGIKRSfypkddtpgctievGVSNGshlaenknk
78712237	gb	AB849414.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9312
23501808	ref	NP_697935.1	bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9312
62289865	ref	YP_221658.1	Bcp, bacterioferritin comigratory protein	Bruceella suis 1330
82599792	ref	YP_414366.1	Bcp, bacterioferritin comigratory protein	Bruceella abortus bv. 1 str. 9-941
161618800	ref	YP_001592767.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bruceella mellitensis biovar Abortus 2308
163843193	ref	YP_001627597.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bruceella canis ATCC 23365
189024107	ref	YP_001934875.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bruceella suis ATCC 23445
23347741	gb	AA029850.1	alkyl hydroperoxide reductase	Bruceella abortus S19
62195997	gb	AA074297.1	bacterioferritin comigratory protein	Bruceella suis 1330
82615893	emb	CAJ10897.1	Bcp, bacterioferritin comigratory protein	Bruceella abortus biovar 1 str. 9-941
161335661	gb	ABX61996.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bruceella mellitensis biovar Abortus 2308
163673916	gb	ABY38027.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bruceella canis ATCC 23365
189019679	gb	ACD72401.1	alkyl hydroperoxide reductase	Bruceella suis ATCC 23445
194289913	ref	YP_002005820.1	Putative peroxiredoxin	Bruceella abortus S19
193223748	emb	CA069755.1	Putative peroxiredoxin	Cupriavidus taiwanensis
160892127	ref	EDP_02073130.1	hypothetical protein BACUNJI_04590	Cupriavidus taiwanensis
156858605	gb	ED052036.1	hypothetical protein BACUNJI_04590	Bacteroides uniformis ATCC 8492
167464105	ref	ZP_02329194.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacteroides uniformis ATCC 8492
90417700	ref	YP_012256612.1	bacterioferritin comigratory protein	Paenibacillus larvae subsp. larvae BRL-230010
90337372	gb	EA551023.1	bacterioferritin comigratory protein	Aurantimonas sp. S185-9A1
217958073	ref	YP_002336617.1	bacterioferritin comigratory protein	Bacillus cereus H2081.97
206747491	gb	EDJ58681.1	bacterioferritin comigratory protein	Bacillus cereus AH187
217068172	gb	ACJ82422.1	bacterioferritin comigratory protein	Bacillus cereus H3081.97
				Bacillus cereus AH187

159	4.28E-11	198254450.gb	EDY78764.1	antioxidant, AhpC/TSA family	Octadecabacter antarcticus 307	YFYPRDDTTPGCTTTEAlaIlaaasGVSKDkhekliahd
160	0	20808004.ref	NP_623175.1	peroxidoxin	Thermoanaerobacter tengcongensis MB4	YFYPKDNTPGCTKEAVglsidSHRKFIEKYStkgliers
161	0	20516500.gb	AAIM24779.1	Peroxiredoxin	Thermoanaerobacter tengcongensis MB4	TGGGARSTfypaamipngpckkeacGLSADkqkafojdqk
162	0	413995752.gb	AA503819.1	BcpB	Mycobacterium avium subsp. paratuberculosis K-10	YFYPKAMTPGCTVQAQgvsdpdRLPKFIEKEGygdghri
163	0	119356712.ref	ZP_01449878.1	redoxin domain-containing protein	Mycobacterium avium subsp. paratuberculosis K-10	YFYPKDDTTPGCTKEACgvsdvrHKKFAEKTYmgmiv
164	1.38E-09	154274343.ref	XP_001538023.1	predicted protein	Chlorobium phaeobacteroides DSM 266	VAAIIPRPfyrasipgctltqvccGLSADanantksqkn
165	0	116671092.ref	YP_832025.1	redoxin domain-containing protein	Chlorobium phaeobacteroides DSM 266	YFYPAASTPGCTKEACgvsdpdKLAFAEKEGyegljrs
166	0	116611201.gb	ABK03925.1	Redoxin domain protein	Chlorobium phaeobacteroides DSM 266	YFYPKDNTPGCTLEACgvsdpdSHVNFQKHNYegljrs
167	2.63E-13	150015651.gb	EDN10984.1	predicted protein	Aejliomyces capsulatus Nam1	YFYPKDNTPGCSOEAGgirsSHDKFIAKYEsigljrs
168	0	188526940.ref	YP_001909627.1	bacterioferritin comigratory protein	Campylobacter lari RM2100	YFYPKDNTPGCTLEAKgvsdpdSHQHKFISQCSHgljrs
169	0	163782107.ref	ZP_021717106.1	bacterioferritin comigratory protein	Arthrobacter sp. FB24	YFYPKDNTPGCTVEACgvsdpdSHKKFKREKYDlkgjrs
170	9.68E-15	67921313.ref	ZP_00514832.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Hydrogenivirga sp. 128-5-R1-1	YFYPKDFTPGCTLEARGvswvSHREFCDAEGrpalsq
171	1.69E-14	147847917.emb	CAK23468.1	Peroxiredoxin	Hydrogenivirga sp. 128-5-R1-1	LKGKLLVfypkddltpgctaeacGVSDGshrrtaefhq
172	3.78E-11	119511628.ref	ZP_01630734.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Crocospaera watsonii WH 8501	LPAINQVfypkdfisgctlearDLPKYIEKNYgvsad
174	0	24373442.ref	NP_717485.1	thioredoxin-dependent thiol peroxidase	Synechococcus sp. WH 7803	YFYPKASTPGCTVQAQgvsdpdKLAFAEKEQSDygdhri
175	0	23465396.ref	AA54929.1	thioredoxin-dependent thiol peroxidase	Nodularia spumigena CCY9414	YFYPAAMTPGCTTEACgvsdKLRKFAERDHHvgrs
176	8.18E-13	169774049.ref	XP_001821493.1	hypothetical protein	Shewanella oneidensis MR-1	PVAEKRRfyrpasipgctkqacGLSADantfkakqs
177	6.54E-17	48477475.ref	YP_023181.1	Alkyl hydroperoxide reductase	Aspergillus oryzae	YFYPKDFTPGCTTEACgvsdSHRKFREKRYPdglrk
178	5.05E-11	149928833.ref	ZP_01915092.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Picrophilus torridus DSM 9790	TL5AHAGKNLVfypkdsipgctegegVSRDvrgvrs
179	9.21E-16	90881628.ref	ZP_01237419.1	bacterioferritin comigratory protein	Limobacter sp. MED105	LQKKLVfyrpasipgctwaqGVSPDqikfmgfkn
180	5.85E-11	217413592.ref	ZP_0344752.1	hypothetical protein BIF-GAL_01558	Vibrio angustum S14	FFYPAQMSLLCTFEAKgvsdpdKLOEFREKYNdgkdel
181	1.24E-12	110004409.emb	CAK98747.1	probable alkyl hydroperoxide reductase oxidoreductase protein	Bifidobacterium gallium DSM 20093	YFFPKAATPGCTLETLgirsKQTKFQNDNNfjgljrs
182	0	171913934.ref	ZP_02929404.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Spiroplasma citri	ACGGHASTfypkchpigtgctgacGVSDshetrkfkhe
183	0	57640980.ref	YP_183468.1	peroxidoxin bacterioferritin comigratory protein	Verrucomicrobium spinosum DSM 4136	YFYPKDNTPGCTTEAKgvsdSHRKFREKRYHvgrls
184	0	78183965.ref	YP_376400.1	putative bacterioferritin comigratory (BCP) protein	Thermococcus kodakarensis KOD1	LKGKRVVfypkddltpgctkqacGLSISDKshkfkshks
185	0	114563035.ref	ABR25356.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. CC9902	YFYPKASTPGCTVQAQgvsdpdKLAFAEKEQYgdhri
187	5.79E-12	206886416.gb	EDJ246898.1	AhpC/TSA family protein	Shewanella frigidimarina NCIMB 400	FFYPRDDTTPGCTKESlqlafadagaGISKDhwgljrs
188	0	196040205.ref	ZP_03107507.1	bacterioferritin comigratory protein	Rhodobacteriales bacterium Y41	YFYPKDNTPGCTTEACgylfgeklgtGVSPDymgljrs
189	0	145223122.ref	YP_001133800.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Bacillus cereus NVH0597-99	YFYPAASTPGCTKQACgvsdpdKLAFAEKEKvvgvrs
190	2.87E-11	103486650.ref	YP_616211.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Mycobacterium gilvum PYR-GCK	APGIAALslealkgbyFFPAAFTFGCTLEAHvaad
191	0	213002598.ref	ZP_03339745.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Mycobacterium gilvum PYR-GCK	YFYPKAMTPGCTVQAQgvsdtkGLSRFAEKELygdhri
192	2.47E-14	206890099.ref	YP_002246515.1	thioredoxin-dependent thiol peroxidase	Salmonella enterica subsp. enterica serovar Typh. str. 404ty	YFYPKAMTPGCTTEAEgvsdtkGLKFKREKvGumgljrs
193	0	157375569.ref	YP_001474168.1	bacterioferritin comigratory protein	Coprothermobacter proteolyticus DSM 5265	YFYPKASTPGCTVQAQgvsdpdKLAFAEKEQYgdhri
195	1.44E-12	114331620.ref	YP_747842.1	redoxin domain-containing protein	Shewanella sediminis HAW-EB3	FFYPKDDTTPGCTNEGGqirsSHSEKREKRYNvrgljrs
196	0	56460569.gb	AAV155850.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Nitrosomonas eutropha C91	YFYPKAMTPGCTVQAQgvsdpdKGLKFKFMKEYrisfl
197	2.97E-14	113476719.ref	YP_722780.1	peroxidoxin, bacterioferritin comigratory protein	Idiomarina lathiensis L21R	YFYPKDDTTPGCKIQACglsgdSHKQISTKYStkgilry
198	2.80E-11	206559457.ref	YP_002230218.1	putative redoxin protein	Trichodesmium erythraeum IMS101	YFYPAAFTKGCTTEAEHvsaclPALDRAsipdkhven
199	4.61E-15	189183707.ref	YP_001937482.1	peroxidoxin, AhpC/TSA family protein	Burkholderia cenocepacia J2315	YFYPKDNTPGCTLEAQgvsdksHGKFKDKLCoakkaa
200	4.03E-09	170694552.ref	ZP_02885704.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Orientia tsutsugamushi str. Ikeda	LPVALAayfpaafkgtclieahGVSHDIsipshkven



201	170140434.gb	EDT08610.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Burkholderia graminis CAD7M	SLSDFAGERYVYpkanipgctkeaccGISPDVqgvr
202	25022894.1.ref	NP_738997.1	putative bacterioferritin comigratory protein	Corynebacterium efficiens YS-314	YFYPKNDITPGCTTEGLgvrSHDNFNKAKLEvrglrs
203	23494230.dbj	BAC19197.1	putative bacterioferritin comigratory protein	Corynebacterium efficiens YS-314	YFYPKNDITPGCTTEGLgvrSHDNFNKAKLEvrglrs
204	2095019529.ref	YP_052686322.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Burkholderia sp. H160	YFYPKAAATPGCTVQACgispkLAKFAEKQAYdghrl
205	2095000108.ref	IEEA00071.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Burkholderia sp. H160	YFYPKAAATPGCTVQACgispkLAKFAEKQAYdghrl
206	151365727.gb	AB5308727.1	thioredoxin-dependent thiol peroxidase	Shewanella baltica OS 185	WFFPKANTPGCTVQARSwaaladgVGSVDviahwq
207	151365727.gb	AB5308727.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Shewanella baltica OS 185	WFFPKANTPGCTVQARSwaaladgVGSVDviahwq
208	1529666672.ref	YP_001366790.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Kineococcus radiolarians SRS30216	EYVDIAPYpklfdifagctleakLKKDF-SKYNglsad
209	15360189.gb	AB5503192.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Kineococcus radiolarians SRS30216	EYVDIAPYpklfdifagctleakLKKDF-SKYNglsad
210	1232000584.gb	ABM72192.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Kineococcus radiolarians SRS30216	EYVDIAPYpklfdifagctleakLKKDF-SKYNglsad
211	149923275.ref	YP_01911685.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Prochlorococcus marinus str. MIT 9515	AKKKAANKKTYpdrnitsgctleakGVSTDvymgms
212	88905753.ref	YP_001248405.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Prochlorococcus marinus str. MIT 9515	AKKKAANKKTYpdrnitsgctleakGVSTDvymgms
213	149923275.ref	EDM75392.1	bacterioferritin comigratory protein	Plesiocystis pacifica SIR-1	YFYPKNDITPGCTTEAGgvsksHSHQKFKDKLCAkaka
214	148284315.ref	YP_001248405.1	bacterioferritin comigratory protein	Orientia tsusugamushi str. Boryong	YFYPKNDITPGCTTEAGgvsksHSHQKFKDKLCAkaka
215	146739764.emb	CAIM79610.1	bacterioferritin comigratory protein	Orientia tsusugamushi Boryong	YFYPKNDITPGCTTEAGgvsksHSHQKFKDKLCAkaka
216	126662139.ref	YP_017933138.1	bacterioferritin comigratory protein-like	Flavobacteria bacterium BAL38	YFYPKDFITPGCTTQACgvsgrdSHQNFQKRYKsakhli
217	126625518.gb	EA296207.1	bacterioferritin comigratory protein-like	Flavobacteria bacterium BAL38	YFYPKDFITPGCTTQACgvsgrdSHQNFQKRYKsakhli
218	161528068.ref	YP_001581894.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Nitrosopumilus maritimus SCM1	YFYPKDFITPGCTTQACgvsgrdSHQNFQKRYKsakhli
219	160339369.gb	ABX12456.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Nitrosopumilus maritimus SCM1	YFYPKDFITPGCTTQACgvsgrdSHQNFQKRYKsakhli
220	23007301.ref	YP_00049232.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Magnetspirillum magnetotacticum MS-1	YFYPKDDITPGCTLEAGgvspsdSHDKFRAKYGGeglanl
221	91070599.gb	ABE114663.1	bacterioferritin comigratory protein	Uncultured Prochlorococcus marinus clone HOT0M-786	LVVNLLYpklfdifagctleakLKKDF-SKYNglsad
222	88784571.gb	EAR15741.1	bacterioferritin comigratory protein	Robiginitalea biformata HTCC2501	FFYPKADITPGCTAEACgvsadKQAKFRDKYVsyghlk
223	21221348.ref	NP_627127.1	hypothetical protein	Streptomyces coelicolor A3(2)	YFYPKADITPGCTAEACgvsadKQAKFRDKYVsyghlk
224	7638005.emb	CAB88842.1	bacterioferritin comigratory protein	Streptomyces coelicolor A3(2)	YFYPKADITPGCTAEACgvsadKQAKFRDKYVsyghlk
225	109948929.ref	YP_664157.1	bacterioferritin comigratory protein	Helicobacter acinonychis str. Sheeba	YFYPKNDITPGCTLEAGgvspsdSHQKFSQCSHlgllrs
226	109714150.emb	CAJ991358.1	bacterioferritin comigratory protein	Helicobacter acinonychis str. Sheeba	YFYPKNDITPGCTLEAGgvspsdSHQKFSQCSHlgllrs
227	84494374.ref	YP_00993493.1	putative bacterioferritin comigratory protein	Janibacter sp. HTCC2649	YFYPKADITPGCTAEACgvsadKQAKFRDKYVsyghlk
228	84383867.gb	EAP99747.1	putative bacterioferritin comigratory protein	Janibacter sp. HTCC2649	YFYPKADITPGCTAEACgvsadKQAKFRDKYVsyghlk
229	172038271.ref	YP_001804772.1	putative bacterioferritin comigratory protein	Cyanosyce sp. ATCC 51142	YFYPKDDITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
230	171699725.gb	AC852706.1	putative bacterioferritin comigratory protein	Cyanosyce sp. ATCC 51142	YFYPKDDITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
231	168882410.gb	AC881320.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Methylobacterium populi BJ001	LPGAGGEYpklfdifagctleagVSPDshnkdfrakyy
232	179345908.gb	ACB81320.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Methylobacterium populi BJ001	LPGAGGEYpklfdifagctleagVSPDshnkdfrakyy
233	197625530.gb	EDY938098.1	bacterioferritin comigratory protein	Cyanobium sp. PCC 7001	APLIALAFykpdkitpctkeaccGVSGDshqfrqtrhn
234	41409427.ref	NP_961263.1	hypothetical protein	Mycobacterium avium subsp. paratuberculosis K-10	YFYPKADITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
235	413987633.gb	AA504646.1	Bcp	Mycobacterium avium subsp. paratuberculosis K-10	YFYPKADITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
236	159028619.emb	CAO90622.1	unmated protein product	Mycobacterium avium subsp. paratuberculosis K-10	YFYPKADITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
237	86808536.ref	YP_477298.1	anti-oxidant AhpC/TSA family protein	Synechococcus sp. JA-2-3B a(2-13)	YFYPKDDITPGCTLEAGgvsmsdSHQKFTKYNygeklak
238	66557078.gb	ABD02035.1	antioxidant. AhpC/Ts aa family	Synechococcus sp. JA-2-3B a(2-13)	YFYPKDDITPGCTLEAGgvsmsdSHQKFTKYNygeklak
239	91204994.ref	YP_537349.1	bacterioferritin comigratory protein	Rickettsia bellii RML369-C	YFYPKADITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
240	157827674.ref	YP_001496738.1	bacterioferritin comigratory protein	Rickettsia bellii OSU 85-389	YFYPKADITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
241	91068538.gb	ABE04280.1	Bacterioferritin comigratory protein	Rickettsia bellii RML369-C	YFYPKADITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
242	157802978.gb	ABV79701.1	Bacterioferritin comigratory protein	Rickettsia bellii OSU 85-389	YFYPKADITPGCTKEAGgvsmsdSHKAFKEKYGegllsy
243	115524980.ref	YP_781894.1	redoxin domain-containing protein	Rhodopseudomonas palustris BisA53	AAGSGAAshkpaakliffFYPRAGTPGCTREAlgvsad
244	126649115.ref	ABJ08911.1	redoxin domain protein	Rhodopseudomonas palustris BisA53	AAGSGAAshkpaakliffFYPRAGTPGCTREAlgvsad
245	1266574694.gb	EA279081.1	putative bacterioferritin co-migratory protein	Algoriphagus sp. PR1	FEAKIESYpklfdipgctkeaccGVSSDshqkfktaqs
246	14764582.ref	YP_01443786.1	peroxiredoxin	Algoriphagus sp. PR1	FFYPKDDITPGCTKEAGgvsmsdSHQKFTKYNygeklak
247	114542988.gb	EAU46978.1	Peroxioredoxin	Roseovarius sp. HTCC2601	FFYPKDDITPGCTKEAGgvsmsdSHQKFTKYNygeklak
248	113460638.ref	YP_718704.1	thioredoxin-dependent thiol peroxidase	Roseovarius sp. HTCC2601	FFYPKDDITPGCTKEAGgvsmsdSHQKFTKYNygeklak
249	112822681.gb	ABI24770.1	bacterioferritin comigratory protein	Haemophilus somnus 129PT	YFYPKALTPGCTTQACgvspsdKLANFIEKKAfdghrl
250	13541117.ref	NP_110805.1	peroxiredoxin	Haemophilus somnus 129PT	YFYPKALTPGCTTQACgvspsdKLANFIEKKAfdghrl
251	14324503.dbj	BA859431.1	bacterioferritin comigratory protein	Thermoplasma volcanium GSS1	AFFFGAFTSVCTKEMCgvsdSLAEFAKKNHleakrs
252	194963195.ref	YP_002096218.1	bacterioferritin comigratory protein	Burkholderia dolosa AU0158	Burkholderia dolosa AU0158
253	124894819.gb	EA768699.1	Peroxioredoxin	Burkholderia dolosa AU0158	Burkholderia dolosa AU0158
254	218895591.ref	YP_002444002.1	bacterioferritin comigratory protein	Bacillus cereus G9842	YFYPKDMITPGCTTEACgvspsdRHLKFKIEKHEymgiers
255	218543710.gb	ACR96104.1	bacterioferritin comigratory protein	Bacillus cereus G9842	YFYPKDMITPGCTTEACgvspsdRHLKFKIEKHEymgiers
256	1239665324.ref	YP_001010405.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. MIT 9515	YFYPKNDITPGCTKEAGglsksHSLKIEKFDikvkaal
257	123199690.gb	ABM71298.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. MIT 9515	YFYPKNDITPGCTKEAGglsksHSLKIEKFDikvkaal
258	148242441.ref	YP_001227598.1	peroxiredoxin	Synechococcus sp. RCC307	LGKKPLVfypkdkdtpgctleaccGVSGDshrfvskfq
259	147850751.emb	CAK28245.1	Peroxioredoxin	Synechococcus sp. RCC307	LGKKPLVfypkdkdtpgctleaccGVSGDshrfvskfq
260	116786006.gb	ABK23968.1	unknown	Synechococcus sp. RCC307	LGKKPLVfypkdkdtpgctleaccGVSGDshrfvskfq
261	7366113.ref	YP_303129.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mai allergen	Ehrlichia canis str. Jake	PPKIVAVfypadeapcckleaccGVSGDshkdkfrakyr
262	72394254.gb	AA268531.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mai allergen	Ehrlichia canis str. Jake	PPKIVAVfypadeapcckleaccGVSGDshkdkfrakyr
263	209524266.ref	YP_03272816.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Arthropia maxima CS-328	YFYPKDDITPGCTKEAGgvsksHDFNFKRKHNYmgiers
264	209524266.ref	EDZ95662.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Arthropia maxima CS-328	YFYPKDDITPGCTKEAGgvsksHDFNFKRKHNYmgiers
265	208434092.gb	YP_002265768.1	bacterioferritin comigratory protein	Helicobacter pylori G27	YFYPKNDITPGCTKEAGgvsksHDFNFKRKHNYmgiers
266	208432021.gb	ACJ26892.1	bacterioferritin comigratory protein	Helicobacter pylori G27	YFYPKNDITPGCTKEAGgvsksHDFNFKRKHNYmgiers
267	60680706.ref	YP_210850.1	putative bacterioferritin comigratory protein	Bacteroides fragilis NCTC 9343	LLGINEKYpklfdipgctleaccGVSVShqkfkfaknn
268	60492140.emb	CAH06903.1	putative bacterioferritin comigratory protein	Bacteroides fragilis NCTC 9343	LLGINEKYpklfdipgctleaccGVSVShqkfkfaknn
269	33593743.ref	NP_881387.1	hypothetical protein BP2787	Bordetella pertussis Tohamia 1	YFYPKNDITPGCTTESGvrsdSHENFKTKYEvrglrs

33597064	ref	NP_884707.1	hypothetical protein BPP2476		Bordetella parapertussis 12822	
33600908	ref	NP_888468.1	hypothetical protein BB1923		Bordetella bronchiseptica RB50	
33663816	emb	CAE43060.1	hypothetical protein		Bordetella pertussis Tohama 1	
33668515	emb	CAE37771.1	hypothetical protein		Bordetella parapertussis	
238	0	205372595	ref	YP_03225406.1	Bordetella bronchiseptica RB50	
239	3.71E-13	163801821	ref	YP_02195718.1	Bacillus coahuilensis m4-4	YFYPKDMTPGCTTEACGvyspdSHEKFINKHdymgvvrs SLGDFKGGKLYypkampiqtqaaGVSDIgdjhr
240	3.81E-11	165282585	ref	YP_001580297.1	Vibrio campbelli AND4	YFYPAAFTKGCITAEHgvsaDL PALDRAspsdkhven SLGDFKGGKLYypkampiqtqaaGVSDIgdjhr
241	0	169349977	ref	YP_001945605.1	Burkholderia multivorans ATCC 17616	
242	0	160342714	gb	ABX15800.1	Burkholderia multivorans ATCC 17616	
243	0	189333999	tbl	BA043069.1	Burkholderia multivorans ATCC 17616	
244	0	15627132	ref	NP_301395.1	Burkholderia multivorans ATCC 17616	
245	0	2222710	emb	CAB08905.1	Mycobacterium leprae TN	
246	0	13092860	emb	CAC29932.1	Mycobacterium leprae	
247	8.34E-15	152971345	ref	YP_0013368454.1	Klebsiella pneumoniae subsp. pneumoniae MGH 78578	YFYPKAMTPGCTVQACgistsdIKLSRFAEKELydgjhr
248	0	15086194	gb	ABR78224.1	Klebsiella pneumoniae subsp. pneumoniae MGH 78578	
249	2.83E-11	33860903	ref	NP_892464.1	Prochlorococcus marinus subsp. pastoris str. COMP1986	QNGTKRSfykdkdtpgctievGVSNGshlatfankk
250	0	33633845	emb	CAE18804.1	Prochlorococcus marinus subsp. pastoris str. COMP1986	
251	0	21283821	ref	YP_002314737.1	Prochlorococcus marinus subsp. pastoris str. COMP1986	
252	0	21285987	gb	ACJ32752.1	Anoxybacillus flavithermus WK1	YFYPKDMTPGCTTEACGjpspdRHKKFIEKHRYmgjers
253	0	145224187	ref	YP_001134865.1	Anoxybacillus flavithermus WK1	
254	0	90415878	ref	YP_01223811.1	Mycobacterium gilvum PYR-GCK	GLLADfyparamtpgctkeacAVGATRVkqaadqkn
255	0	145216673	gb	ABP46077.1	Mycobacterium gilvum PYR-GCK	
256	0	90332252	gb	EAS4749.1	marine gamma proteobacterium HTCC2207	IPASDfSfyypkampiqtqaaGVSDIwfkedlqke
257	8.34E-15	218246467	ref	YP_002371838.1	marine gamma proteobacterium HTCC2207	
258	0	218768945	gb	ACK65682.1	Cyanotoxone sp. PCC 8801	DEGKTVSfyypkddtpgctkeagGVSDIwshkfkelyg
259	0	196156944	gb	ACG66682.1	Cyanotoxone sp. PCC 8801	
260	0	196112723	gb	ACG66439.1	Alteomonas macleodii 'Deep ecotype'	YFYPKAMTPGCTVQACgistspdRLPKFIEKENydgjhr
261	0	118476219	ref	YP_893370.1	Alteomonas macleodii 'Deep ecotype'	
262	0	118415444	gb	AKB33863.1	Bacillus thuringiensis str. Al Hakam	YFYPKDMTPGCTTEACsglglqekktGVSPDymgiers
263	0	123967918	ref	YP_001008776.1	Bacillus thuringiensis str. Al Hakam	
264	0	153208921	ref	YP_01947140.1	Prochlorococcus marinus str. AS9601	QNGVKRSfyypkddtpgctievGVSNGshlatfankk
265	0	153208921	ref	YP_01947140.1	Prochlorococcus marinus str. AS9601	
266	0	165923358	ref	YP_02219695.1	Coxiella burnetii MSU Goat Q177	LKGKKVfyypkddtpgctkeagGVSDIwshkfkelyg
267	0	120876642	gb	EAX32266.1	Coxiella burnetii RSA 334	
268	0	165916684	gb	EDR35288.1	Coxiella burnetii MSU Goat Q177	
269	0	167040492	ref	YP_001663477.1	Thermoanaerobacter sp. X514	YFYPKDMTPGCTKEAVgisdISHKKFIEKHFKnmgiers
270	0	166854732	gb	ABY93141.1	Thermoanaerobacter sp. X514	
271	0	712803591	ref	YP_269882.1	Thermoanaerobacter sp. X514	
272	0	711460990	gb	AAZ26572.1	Colwellia psychrotolerans 34H	YFYPKAMTPGCTVQACgistspdGLKKFMGKEYlqgksh
273	0	86133389	ref	YP_0105198.1	Colwellia psychrotolerans 34H	
274	0	85820282	gb	EA041409.1	Tenacibaculum sp. MED152	FFYPKASTPGCTTAEACgvyspdRQGNFINKNEYdgjhr
275	0	187934338	ref	YP_001887500.1	Polibaacter sp. MED152	
276	0	206967941	ref	YP_03228897.1	Glostridium botulinum B str. Eklund 17B	YFYPKDMTPGCTTEACgistskshNRFISKFNvgiers
277	0	218238119	ref	YP_002365319.1	Glostridium botulinum B str. Eklund 17B	
278	0	206738681	gb	EDJ54008.1	Bacillus cereus AH134	YFYPKDMTPGCTTEACgyspdRHLKFKIEKHRYmgiers
279	0	218164076	gb	ACK64068.1	Bacillus cereus AH134	
280	0	15609658	ref	NP_217037.1	Bacillus cereus B4264	YFYPKDMTPGCTTEACgistskshNRFISKFNvgiers
281	0	15842053	ref	NP_337090.1	Mycobacterium tuberculosis H37Rv	YFYPAASTPGCTKQACgistspdKLAIFRDAQGvqgvvrs
282	0	121639404	ref	YP_978628.1	Mycobacterium tuberculosis CDC1551	
283	0	148662358	ref	YP_001283881.1	Mycobacterium bovis BCG str. Pasteur 1173P2	
284	0	148623717	ref	YP_001283881.1	Mycobacterium bovis BCG str. Pasteur 1173P2	
285	0	167967319	ref	YP_02549596.1	Mycobacterium tuberculosis H37Ra	
286	0	194544696	ref	YP_002079725.1	Mycobacterium tuberculosis H37Ra	
287	0	197737543	ref	YP_002158860.1	Mycobacterium tuberculosis C	
288	0	215404459	ref	YP_03416840.1	Mycobacterium tuberculosis str. Haarlem	
289	0	215412282	ref	YP_03421052.1	Mycobacterium tuberculosis 02_1987	
290	0	215427908	ref	YP_03425827.1	Mycobacterium tuberculosis 192	
291	0	215441466	ref	YP_03429385.1	Mycobacterium tuberculosis EAS054	
292	0	215446773	ref	YP_03433525.1	Mycobacterium tuberculosis T85	
293	0	218754253	ref	YP_03533049.1	Mycobacterium tuberculosis GM_1503	
294	0	2791423	emb	CAA18017.1	Mycobacterium tuberculosis H37Rv	
295	0	13882332	gb	AAK46904.1	Mycobacterium tuberculosis CDC1551	
296	0	121494052	emb	CAL72530.1	Mycobacterium bovis BCG str. Pasteur 1173P2	
297	0	124601703	gb	EAY60713.1	Mycobacterium tuberculosis C	
298	0	134152238	gb	EBAA44283.1	Mycobacterium tuberculosis str. Haarlem	
299	0	148506510	gb	EBA074319.1	Mycobacterium tuberculosis H37Ra	
300	0	148722244	gb	ABR08869.1	Mycobacterium tuberculosis F11	
258	0	160901625	ref	YP_0015617206.1	Petrologia mobilis S195	YFYPKDMTPGCTKEAVgyspdKHLANFKENKdmgvrvrs

259	160359269.gb	ABX30883.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Petrotoga mobilis SJ95	YFYPKDNTPGCTLEAKAGSPASQSHQKFISSQSHlgllirs
0	15611194.ref	NP_222845.1	bacterioferritin comigratory protein	Helicobacter pylori J99	
	7387552.gb	O92MUL.1	BCP_HELPJ RecName: Full=Putative peroxidoredoxin bcp. AltName: F	Helicobacter pylori J99	
260	41594631.gb	AA005701.1	BACTERIOFERRITIN COMIGRATORY PROTEIN	Helicobacter pylori J99	
	33237070.gb	NP_874487.1	peroxidoredoxin	Prochlorococcus marinus subsp. marinus str. CCMP1375	YFYPKDDTTPGCTKEACGlskklHSHKFINKYOlkvkaas
261	1194907741.ref	ZP_01623106.1	bacterioferritin comigratory protein	Lynghya sp. PCC 8106	SLSDFRGPVYpyyrdntpgtckeadLVAEYRSyvgjre
262	1194537568.gb	EAW94916.1	bacterioferritin comigratory protein	Lynghya sp. PCC 8106	
263	5.38E-13	6044220.gb	putative bacterioferritin comigratory protein	Saccharophagus degradans 2-40	YFYPKAMITPGCTVQVQAGcjspsdRLKFKFKQKEmgllrt
264	2.08E-13	2184339870.ref	MCP1 gene product	Saccharophagus degradans 2-40	0
265	6.53E-11	1637386644.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 7424	YFYPQDFTPGCTLEARDIakleaknaGVASADrpahsa
	1637386644.ref	ZP_021444033.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 7424	
	1637472759.ref	ZP_02160124.1	Redoxin	Phaeobacter gallaeciensis BS107	FFYPRDDTTPGCTKEShlnqafatagagaSISKdhuglers
	161383994.gb	EDQ00837.8	AtPc/TSA family protein	Phaeobacter gallaeciensis 2. 10	
266	0	150025635.ref	Redoxin	Phaeobacter gallaeciensis BS107	
	149772376.emb	CAL43866.1	Probable peroxidoredoxin	Flavobacterium psychrophilum J1P02/86	YFYPKDEITPGCTKQACgjsdsSHKKFAQNHKInasjhs
267	7.02E-14	196230542.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Flavobacterium psychrophilum J1P02/86	
	196225472.gb	EDY19980.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chthonobacter flavus Ellin428	LLATLVSyfyphkadtptgckagcGVSEDaqlafantyn
268	4.65E-11	18312243.ref	antioxidant protein, putative	Chthonobacter flavus Ellin428	YFFPKAFITGQCTRETlqyvtidTLRKFADRYGqlgllrt
	18159685.gb	AA163092.1	antioxidant protein, putative	Pyrobaculum aerophilum str. IM2	
269	0	1962333316.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chthonobacter flavus Ellin428	YFYPKADITPGCTKEACGjssedAQKKFRDKYHspgllhva
	196222621.gb	EDY17146.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chthonobacter flavus Ellin428	
270	4.14E-13	126946002.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pyrobaculum calidifontis JCM 11548	LFPPGAFITSVCTKELCaisvdSLSKEFKKRNRawllap
	126946002.ref	YP_001056299.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pyrobaculum calidifontis JCM 11548	
271	0	118619048.ref	bacterioferritin comigratory protein Bcp	Mycobacterium ulcerans Agy99	YFYPAASTPGCTKQACgjspskKLAKFRDAEGVtgvirs
	183983928.ref	YP_001852219.1	bacterioferritin comigratory protein Bcp	Mycobacterium marinum M	
272	0	46199237.ref	bacterioferritin comigratory protein Bcp	Mycobacterium marinum M	
	46199662.gb	AA581277.1	bacterioferritin comigratory protein	Thermus thermophilus HB27	YFYPKDDITPGCTKEACGjvsadSHKRF AEKYGVegvllrq
273	4.87E-15	65819397.ref	bacterioferritin comigratory protein	Thermus thermophilus HB27	
	65819397.gb	EA0405656.1	bacterioferritin comigratory protein-like	Celiulophaga sp. MED134	YFYPKFNFTPGCTAQACGjsadSHKRRFRRAKHngknrr
274	8.06E-12	196256139.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Dokdonia donghaensis MED134	YFYPKDFITSGCTLEARldklyaeaknaGVSRDpnhlha
	196203319.gb	EDX98136.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 7822	
275	1.92E-09	114869856.ref	redoxin domain-containing protein	Maricaulis maris MCS10	YLYPKDDITPGCTTQALGlskryMGIQRSSkghvdevl
	114340318.gb	AB165598.1	Redoxin domain protein	Maricaulis maris MCS10	
276	4.36E-15	15927437.ref	bacterioferritin comigratory protein	Staphylococcus aureus subsp. aureus Mu50	LKGGKKAlyfyrpdmptctearcGISGDhnhqntekthg
	21283532.ref	NP_646820.1	hypothetical protein MV11803	Staphylococcus aureus subsp. aureus MW2	
	57650653.ref	YP_186746.1	bacterioferritin comigratory protein	Staphylococcus aureus subsp. aureus COL	
	88195687.ref	YP_500496.1	bacterioferritin comigratory protein	Staphylococcus aureus subsp. aureus USA300	
	156980179.ref	YP_001442438.1	hypothetical protein SAUHSC_01999	Staphylococcus aureus subsp. aureus NCTC 8325	
	161510081.ref	YP_001576740.1	peroxidoredoxin	Staphylococcus aureus subsp. aureus Mu3	
	168727366.ref	ZP_02759633.1	possible peroxidoredoxin	Staphylococcus aureus subsp. aureus USA300_TCH1516	
	13701666.dbj	BAB42949.1	conserved hypothetical protein	Staphylococcus aureus subsp. aureus N315	
	14247635.dbj	BAB58025.1	similar to bacterioferritin comigratory protein	Staphylococcus aureus subsp. aureus Mu50	
	21204973.dbj	BAB95668.1	conserved hypothetical protein	Staphylococcus aureus subsp. aureus MW2	
	57284839.gb	AAW96933.1	bacterioferritin comigratory protein	Staphylococcus aureus subsp. aureus COL	
	87127013.gb	ABD21527.1	bacterioferritin comigratory protein	Staphylococcus aureus subsp. aureus USA300_FPR3757	
	87203245.gb	ABD31095.1	conserved hypothetical protein	Staphylococcus aureus subsp. aureus NCTC_8325	
	156722314.dbj	BAF78731.1	conserved hypothetical protein	Staphylococcus aureus subsp. aureus Mu3	
	160368890.gb	ABX29861.1	possible peroxidoredoxin	Staphylococcus aureus subsp. aureus USA300_TCH1516	
277	1.36E-11	70606900.ref	peroxidoredoxin	Sulfolobus acidocaldarius DSM 639	AFYPGAFTSVCTKEMCGjlsvdsNKAFKQNKyvisks
	68667548.gb	AAV80477.1	peroxidoredoxin	Sulfolobus acidocaldarius DSM 639	
278	4.87E-12	87201167.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Novosphingobium aromaticivorans DSM 12444	FFYPKDDTTPGCTTENKvskdKHLKFAEKHAadgktaq
	87136848.gb	ABD27590.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Novosphingobium aromaticivorans DSM 12444	
279	2.13E-15	124025683.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. NATL-1A	LYASINSSldfkskwllyfYPKDFSSGCTLEAKGlsad
	1239607531.gb	ABM75534.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. NATL-1A	
280	0	1893463016.gb	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobium limicola DSM 245	PTADYfypkddltpgckeadLGVSDSsktsktaekyd
	189340453.gb	ACD89866.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobium limicola DSM 245	
281	3.55E-12	163759547.ref	bacterioferritin comigratory protein	Hoeflea phototrophica DFL-43	SPAIHlMlyfypkddltpgckeadLGM5ADktdlflaktln
	162283144.gb	EDQ30340.1	bacterioferritin comigratory protein	Hoeflea phototrophica DFL-43	
282	1.30E-17	217966881.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Dicyleoglossum turgidum DSM 6724	QNGKEVSYfypkdmitsgctkeavGISKDskhkaekyn
	2173335916.gb	ACK41709.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Dicyleoglossum turgidum DSM 6724	
283	7.28E-10	1714632019.ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Polynucleobacter necessarius subsp. necessarius STIR1	AKGKKLlyfypkdmtpgctaeagGVSRDshdnrskle
	17192747.gb	ACB43708.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Polynucleobacter necessarius subsp. necessarius STIR1	
284	1.77E-12	163746645.ref	AtPc/TSA family protein	Oceanibulbus indoliflex HEL-45	FFYPRDDTTPGCTKESlgjstdrkKHDRFASKHAatgktaq

285	1.95E-13	161379759 gb	ED004171.1	AhpC/TSA family protein.	Oocamibulus indolifex HEL-45	YFYPKDDITSGCTTQAQGVSPD	SHQKFRKTRHNYGILRS
286	5.42E-14	1567241319 ref	YP_001431448.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseiflexus castenholzii DSM 13941	YFYPKDDITSGCTTQAQGVSPD	SHQKFRKTRHNYGILRS
287	2.71E-15	1842000298 gb	EDX95119.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseiflexus castenholzii DSM 13941	LKVGDRAYYPKDDITSGCTTQAQGVSPD	SHQKFRKTRHNYGILRS
288	5.66E-11	183580894 dbj	BA629365.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanothoe sp. PCC 7822	YFYPRAATPGCTTAQAQGVSPD	ARFSAEHDVEGLRS
289	1.96E-16	6824866 ref	YP_001173281.1	hydroperoxide peroxidase	Kocuria rhizophila DC2201	YFYPKDNTPGCTTEGQIHQALFAAN	GVSRDYGVDRS
290	2.93E-13	58696630 gb	AA187313.1	bacterioferritin comigratory protein	Pseudomonas stutzeri A1501	YFYPKALTPGCTTQAQGVSPD	KAQIEKKAQYDGLNRI
291	2.31E-11	86138783 ref	YP_01057355.1	thioredoxin-dependent thiol peroxidase	Haemophilus influenzae 86-028NP	YFYPKDNTPGCTTQAQGVSPD	SHGKFKITKQESIGERS
292	1.03E-13	70952012 ref	XP_745203.1	bacterioferritin comigratory protein	Haemophilus influenzae 86-028NP	YFYPKALTPGCTTQAQGVSPD	KAQIEKKAQYDGLNRI
293	0	146312617 ref	YP_001177691.1	thioredoxin-dependent thiol peroxidase	Helobacillus mobilis	SLSSEFEDKKNYYPKDDITSGCTTQAQGVSPD	MEAGVSKDIPISLVS
294	2.16E-10	88811529 ref	YP_01126784.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Wobacchia endosymbiont of Drosophila simulans	FFYPRDDITPGCTKESIHQIFADTAG	GISKDHVIGLRS
295	2.81E-10	88791418 gb	EAR22530.1	Peroxioredoxin	Roseobacter sp. MED193	TLKAEIEKHNIHPKANIPGCTEQAK	GLSADGDIILRS
296	7.39E-13	783664180 gb	ABR42145.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Plasmodium chabaudi chabaudi	YFYPKAMTPGCTVQAQGVSPD	KLSRFAEKELVGLNRI
297	3.33E-13	74316024 ref	YP_315764.1	peroxiredoxin-like protein	Enterobacter sp. 638	YFYPKADITPGCTQEGAGVSRD	AAQNFKDKYGAIGVRS
298	2.00E-13	50084066 ref	YP_045576.1	bacterioferritin comigratory protein	Nitrocoocus mobilis Nb-231	YFYPKDDITPGCTTEGQGVSKDK	HENFKSFDFYMGILRS
299	6.28E-12	118894385 ref	ED059529.1	peroxiredoxin	Thiomicrospira crunogena XCL-2	YFYPKDDITPGCTTQAQGVSPD	KLHFKVDFKYSLIAD
300	6.50E-14	149910480 ref	YP_01899120.1	Putative bacterioferritin comigratory protein	Pelotictyon luteolum DSM 273	AFYPAAFVTSVCTKEMCGISVSD	SNKFAKQCNKYVLAIKRS
301	0	1603934704 ref	YP_02082090.1	hypothetical protein CLOLEP_03579	Sulfolobus solfataricus P2	YFYPKDDITPGCTTQAQGVSPD	INFSLLSPGKIMFGKEF
302	0	166023667 ref	EDR48424.1	hypothetical protein DORFOR_00166	Thiobacillus denitrificans ATCC 25259	EVGKIPAYYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
303	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Acinetobacter sp. ADP1	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
304	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Magnetospirillum magnetium AMB-1	GIGSRRLYYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
305	0	166023667 ref	EDR48424.1	hypothetical protein DORFOR_00166	Magnetospirillum magnetium AMB-1	GIGSRRLYYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
306	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Clostridium leptum DSM 753	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
307	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Clostridium leptum DSM 753	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
308	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Methylophilales bacterium HTCC2181	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
309	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylophilales bacterium HTCC2181	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
310	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Moritella sp. PE36	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
311	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Dorea formicigenans ATCC 27755	EVGKIPAYYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
312	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Dorea formicigenans ATCC 27755	EVGKIPAYYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
313	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Penicillium marneffei ATCC 18224	VQKKAATAKTIPAKSAIFYPRAST	PGCTTKQAASGLID
314	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Penicillium marneffei ATCC 18224	VQKKAATAKTIPAKSAIFYPRAST	PGCTTKQAASGLID
315	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Geobacillus sp. G11MC16	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
316	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Geobacillus sp. G11MC16	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
317	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Arthroabacter sp. FB24	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
318	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Arthroabacter sp. FB24	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
319	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Octadecabacter antarcticus 238	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
320	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Cyanothoe sp. PCC 7822	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
321	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanothoe sp. PCC 7822	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
322	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Pyrobaculum arsenaticum DSM 13514	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
323	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pyrobaculum arsenaticum DSM 13514	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
324	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Methanospirillum hungatei JF-1	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
325	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methanospirillum hungatei JF-1	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
326	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Plasmodium falciparum 3D7	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
327	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Plasmodium falciparum 3D7	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
328	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Prosthecochloris aestuarii DSM 271	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
329	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prosthecochloris aestuarii DSM 271	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
330	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Burkholderia thailandensis E264	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
331	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia thailandensis TXDOH	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
332	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Burkholderia thailandensis B4	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
333	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia thailandensis E264	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
334	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Ralstonia pickettii 12J	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
335	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ralstonia pickettii 12J	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
336	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Saccharomyces cerevisiae	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
337	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Stappia aggregata IAM 12614	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
338	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Stappia aggregata IAM 12614	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
339	0	196250606 ref	AB064871.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Synechococcus sp. WH 7805	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA
340	0	138894163 ref	YP_001124616.1	bacterioferritin comigratory protein	Synechococcus sp. WH 7805	YFYPKDDITSGCTTQAQGVSPD	SHKFKFKKEYGAGGILIA

321	9.92E-12	887815701.gb	EAR18727.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Synechococcus sp. WH 7805	YFYPKDNTPGCTNESIGSRSHQNFKAQKLEVrgiers
		344982701.ref	NP_902485.1	bacterioferritin comigratory protein	Chromobacterium violaceum ATCC 12472	
		34104124.gb	AA060483.1	bacterioferritin comigratory protein	Chromobacterium violaceum ATCC 12472	
322	2.94E-18	293500191.ref	NP_813522.1	putative bacterioferritin co-migratory protein	Bacteroides thetaiotaomicron VPI-5482	YFYPKDSITSGCTAQAGyvsvdSHQKFKIDKKNNeeglier
		29341930.gb	AA079716.1	putative bacterioferritin co-migratory protein	Bacteroides thetaiotaomicron VPI-5482	
323	5.26E-17	1901501721.ref	YP_001968697.1	putative peroxiredoxin Bcp	Actinobacillus pleuropneumoniae serovar 7 str. AP76	YFYPKALTPGCTTQAAGyvspKLAQFAEAKKAYdgihri
		189915303.gb	ACE61555.1	putative peroxiredoxin Bcp	Actinobacillus pleuropneumoniae serovar 7 str. AP76	
324	1.73E-13	1542481151.ref	YP_001419073.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthobacter autotrophicus Py2	YFYPKANTTGC7KEAlyvsaaQDKFKAKYDvmjiera
		154162200.gb	AB556946.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthobacter autotrophicus Py2	
325	5.29E-15	209524888.ref	ZP_03273444.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthobacter autotrophicus Py2	LSAGTKAylypkdtdpgctkeagVSTDshkfkfkyg
		209494777.gb	ED7295086.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthobacter autotrophicus Py2	
326	2.66E-13	425210301.ref	NP_966995.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Arthrospira maxima CS-328	SLSEFFDKKNlypkdtdpgctmeakGVSKDlpisvs
		42410821.gb	AA514929.1	bacterioferritin comigratory protein	Wobaschia endosymbiont of Drosophila melanogaster	
327	0	154488608.ref	ZP_02029457.1	hypothetical protein BIFADO_01915	Bifidobacterium adolescentis L2-32	TLRSALRGNlyfyaamtgtpctteacGISKDYegvirs
		154082745.gb	ED1N81790.1	hypothetical protein BIFADO_01915	Bifidobacterium adolescentis L2-32	
328	4.71E-10	167969478.ref	ZP_02362352.1	antioxidant. AhpC/TSA family protein	Burkholderia oklahomensis C8786	YFYPAAFTTGC7TIEAlyvsadDAKRIREkpaiksnr
		1712764261.ref	ZP_00682703.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xylella fastidiosa Dixon	YFYPKDNTPGCTTEGLyvsrdSHDSFCAKQGlgiers
329	2.41E-11	719005051.ref	ZP_00682635.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xylella fastidiosa Dixon	
		1707309741.ref	YP_001776407.1	bacterioferritin comigratory protein	Xylella fastidiosa M12	
		71162742.gb	EA012468.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xylella fastidiosa Dixon	
		167965677.gb	ACA12777.1	bacterioferritin comigratory protein	Xylella fastidiosa M12	
330	8.33E-11	172300481.ref	NP_486596.1	bacterioferritin comigratory protein	Nostoc sp. PCC 7120	YFYPKDFTSGCTIEARyvsadPQGLIREkrgkstas
		171316481.dbl	BA874255.1	bacterioferritin comigratory protein	Nostoc sp. PCC 7120	
331	0	464457251.ref	YP_007090.1	putative bacterioferritin comigratory protein (BCP)	Candidatus Protoclamydia amoebophila UWE25	LPVSVRostkafdeeqnYFYPKDDTTPGCTLQAQgispd
		463993661.emb	CAT22815.1	putative bacterioferritin comigratory protein (BCP)	Candidatus Protoclamydia amoebophila UWE25	
332	1.40E-17	1184829481.gb	ABK93386.1	unknown	Populus trichocarpa	LSKSSRSlyfpadespctkqacGISGdshkafaknrr
		771659841.ref	YP_344509.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrosococcus oceani ATCC 19707	YFYPKDDTTPGCTREGGlyvsrdSHETFKAQQRvkgiers
333	1.26E-12	768842981.gb	ABA58979.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrosococcus oceani ATCC 19707	
		207088008.gb	ED765282.1	antioxidant. AhpC/TSA family	Nitrosococcus oceani AFC27	
334	0	723832791.ref	YP_292834.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. NATL2A	YFYPKDDTTPGCTKEACgjskshSHKFKIDKHKkgtiel
		720031291.gb	AAZ598931.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. NATL2A	
335	2.21E-16	222951671.dbl	BAO09003.1	bacterioferritin comigratory protein	Thermosynechococcus elongatus BP-1	YFYPKDDTTPGCTTEACgjspsdSHAKFQQKLDpjtkaa
		537236301.ref	YP_103051.1	anti-oxidant AhpC/TSA family protein	Burkholderia mallei ATCC 23344	SLSGIKGKKlyfypkdpdpctteaglGVSRDvrgiers
336	3.13E-11	676395651.ref	ZP_00438412.1	COG1225: Peroxiredoxin	Burkholderia mallei GB8 horse 4	
		1218994031.ref	YP_993204.1	anti-oxidant AhpC/TSA family protein	Burkholderia mallei SAVP1	
		1679656841.ref	YP_001026021.1	anti-oxidant AhpC/TSA family protein	Burkholderia mallei NCTC 10229	
		1264507021.ref	YP_001080711.1	anti-oxidant AhpC/TSA family protein	Burkholderia mallei NCTC 10247	
		164003861.ref	ZP_02289640.1	antioxidant. AhpC/Tsa family protein	Burkholderia mallei PRL-20	
		1943138791.ref	YP_002009559.1	antioxidant. AhpC/Tsa family	Burkholderia mallei ATCC 10399	
		1945255821.ref	YP_002061112.1	antioxidant. AhpC/TSA family	Burkholderia mallei FMH	
		1945257831.ref	YP_002062584.1	antioxidant. AhpC/TSA family	Burkholderia mallei JHU	
		1945751321.ref	YP_002110016.1	antioxidant. AhpC/TSA family	Burkholderia mallei 2002721280	
		524270531.gb	AAU47646.1	antioxidant. AhpC/Tsa family	Burkholderia mallei ATCC 23344	
		1212272131.gb	ABM49731.1	antioxidant. AhpC/Tsa family	Burkholderia mallei SAVP1	
		1242938741.gb	ABN03143.1	antioxidant. AhpC/Tsa family	Burkholderia mallei NCTC 10229	
		1262435721.gb	ABO06665.1	antioxidant. AhpC/Tsa family	Burkholderia mallei NCTC 10247	
		1477495921.gb	EDK56666.1	antioxidant. AhpC/TSA family	Burkholderia mallei FMH	
		1477537731.gb	EDK60838.1	antioxidant. AhpC/TSA family	Burkholderia mallei JHU	
		1480273841.gb	EDK85405.1	antioxidant. AhpC/TSA family	Burkholderia mallei 2002721280	
		1606992551.gb	EDP89225.1	antioxidant. AhpC/Tsa family	Burkholderia mallei ATCC 10399	
337	0	1140479061.ref	YP_738456.1	thioredoxin-dependent thiol peroxidase	Shewanella sp. MR-7	YFYPKASITPGCTVQAAGyvspKLAQFAEKQSYdgihri
		1138893481.gb	ABL43399.1	Redoxin domain protein	Shewanella sp. MR-7	
338	0	779608591.ref	ZP_00824713.1	COG1225: Peroxiredoxin	Yersinia mollaretii ATCC 43989	YFYPKAMTTPGCTVQAAGyvsdKLSRFAEKELydgihri
		668091651.ref	XP_638305.1	AhpC/TSA family protein	Dicyostelium discoideum AX4	QNGKNlyfypkdkdskcneacGISNDsharfnisks
339	1.75E-10	60466751.gb	EAL64800.1	AhpC/TSA family protein	Dicyostelium discoideum AX4	
340	6.26E-15	1962453621.ref	ZP_03144086.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 8802	DEGKTVSlyfypkddtpgctteagVSMDSkfkfkyg
		1962006811.gb	EDY01686.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanotheca sp. PCC 8802	
341	0	1088000610.ref	YP_640807.1	redoxin	Mycobacterium sp. MCS	YFYPAASTPGCTKQAAGyvspKLAQFAEKQSYdgivirs
		1196697491.ref	YP_939701.1	redoxin domain-containing protein	Mycobacterium sp. KMS	
		1264362341.ref	YP_001071925.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Mycobacterium sp. JLS	
		1087710291.gb	ABG09751.1	Redoxin	Mycobacterium sp. MCS	
		1196958381.gb	ABL92911.1	Redoxin domain protein	Mycobacterium sp. KMS	
		1262360341.gb	ABN99434.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Mycobacterium sp. JLS	
342	5.96E-13	2179706961.ref	YP_002355930.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thaera sp. MZ1T	YFYPKDKTTPGCTRQAAGyvspdTAEFRDQEGkmgvirs
		1775080231.gb	ACK55034.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thaera sp. MZ1T	
343	1.83E-11	461375611.ref	XP_390472.1	hypothetical protein EG10296.1	Gibberella zeae PH-1	AAAKVAEKEDlypkasidgkvcGLSTDivaegas
		166364241.ref	YP_001656547.1	bacterioferritin comigratory protein	Microcystis aeruginosa NIES-843	YFYPKDFITPGCTLEARyvsadSHAELFCDSEGnpalhisa
344	1.26E-14	166086647.dbl	BAO01355.1	bacterioferritin comigratory protein	Microcystis aeruginosa NIES-843	
345	1.20E-14	1928082551.ref	ZP_03036932.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Geobacillus sp. Y412MFC10	FFYPKNMPTITETEEACgjspsdSHAKFKIDKHSymgivirs

346	1.13E-10	888519848	ref	ZP_01134487.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Geobacillus sp. Y412MC10
347	0	62591328	ref	YP_226730.1	bacterioferritin comigratory protein	Pseudocitronomonas tunicata D2
348	3.43E-19	206901569	emb	CAT_21151.1	PROBABLE BACTERIOFERRITIN COMIGRATORY OXIDOREDUCTASE	Corynebacterium glutamicum ATCC 13032
349	3.65E-16	218248242	ref	YP_002251060.1	bacterioferritin comigratory protein	Dicyoglomus thermophilum H-6-12
350	1.68E-14	88808472	ref	ZP_01123922.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanosche sp. PCC 8801
351	6.24E-11	123965617	ref	YP_001010698.1	putative bacterioferritin comigratory protein	Synechococcus sp. WH 7805
352	5.08E-16	119482324	ref	ZP_016203653.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9515
353	0	451878765	ref	NP_984079.1	bacterioferritin comigratory protein	Lyngbya sp. PCC 8 106
354	4.76E-13	44882640	ref	AA5519103.1	merozoit cappling protein 1	Ashbya gossypii ATCC 10895
355	7.47E-12	218531160	ref	YP_002421976.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Plasmodium vivax Sal-1
356	1.17E-11	218529463	gb	ACK84048.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Plasmodium vivax
357	5.13E-10	144898144	emb	CAW75008.1	bacterioferritin comigratory protein	Methylobacterium chloromethanicum CM4
358	0	124543815	ref	YP_01707852.1	Redoxin	Methylobacterium chloromethanicum CM4
359	4.41E-17	218130651	ref	ZP_034593655.1	hypothetical protein BACEGG_02140	Hyphomonas neptunium ATCC 15444
360	1.30E-16	148825467	ref	YP_001290202.1	thioredoxin-dependent thiol peroxidase	Magnetsporillum glyphiswaldense MSR-1
361	0	50285829	ref	XP_445343.1	unnamed protein product	Shewanella putrefaciens 200
362	4.19E-13	17105871	ref	YP_001791080.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacteroides eggertii DSM 20697
363	6.43E-13	167472217	ref	AC343295.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacteroides eggertii DSM 20697
364	0	17230867	ref	NP_486415.1	thioredoxin peroxidase	Haemophilus influenzae PRTE
365	5.70E-13	88863755	gb	ABD54632.1	hypothetical protein all2375	Candida glabrata
366	4.08E-12	119457393	gb	EAW38518.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Candida glabrata
367	0	15898858	ref	NP_343463.1	peroxiredoxin	Leptothrix cholodnii SP-6
368	1.77E-14	157964860	ref	YP_001499884.1	bacterioferritin comigratory protein	Leptothrix cholodnii SP-6
369	0	157691608	ref	YP_001488070.1	peroxiredoxin YpaF	Rickettsia massillae MTU5
370	1.03E-13	89054206	ref	YP_509657.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacillus pumilus SAFR-032
371	3.30E-09	91782911	ref	YP_558117.1	putative peroxiredoxin, bacterioferritin comigratory protein	Bacillus pumilus SAFR-032
372	0	209525373	ref	ZP_03273914.1	putative peroxiredoxin, bacterioferritin comigratory protein	Bacillus pumilus SAFR-032
373	1.06E-14	182419263	emb	ED294538.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacillus sp. B14905
374	0	126649491	ref	ZP_01721732.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacillus sp. B14905
375	4.95E-13	92117857	ref	YP_577686.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacillus sp. B14905
376	7.57E-11	145888616	ref	YP_001155213.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nitrobacter hamburgensis X14
377	0	34556641	ref	NP_906456.1	bacterioferritin comigratory protein	Nitrobacter hamburgensis X14
378	3.57E-15	57867295	ref	YP_183869.1	bacterioferritin comigratory protein	Polynucleobacter necessarius subsp. symbioticus QLW-P1DMW-1
379	0	192360325	ref	YP_001982138.1	Bcp	Polynucleobacter necessarius subsp. symbioticus QLW-P1DMW-1
380	6.28E-14	121593512	ref	ZP_03470467.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Wolinella succinogenes DSM 1740
		120007592	gb	ABM43332.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Wolinella succinogenes DSM 1740
		218146198	gb	IEEC64266.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Staphylococcus epidermidis RP62A

381	5.94E-11	168952731	qB	ABA39076.2	Integral membrane protein					Streptomyces albus
382	1.16E-14	183999969	ref	YP_0018313220.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Sulfurihydrogenibium sp. YO3AOP1
		183932036	qB	ACD66686.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Sulfurihydrogenibium sp. YO3AOP1
383	0	6322180	ref	NP_017225.1	Nuclear Thiol peroxidase which functions as an alkyl-hydroperoxide reductase					Saccharomyces cerevisiae
		731778	sp	P40553.1	DOT5_YEAST RecName: Full=Peroxidoredoxin DOT5; AltName: Full=unamed protein product					Saccharomyces cerevisiae
		558392	emb	CAA882.3	YIL010W					Saccharomyces cerevisiae
384	1.41E-11	89095083	ref	ZP_01168010.1	AhpC/TSA family protein					Oceanosprillum sp. MED92
		45270486	qB	AAS56624.1	AhpC/TSA family protein					Oceanosprillum sp. MED92
385	7.31E-11	89080644	qB	EAR59889.1	AhpC/TSA family protein					Erythrobacter sp. NBP1
		85708767	ref	ZP_01039833.1	bacterioferritin comigratory protein, putative					Erythrobacter sp. NBP1
386	0	85690301	qB	EAQ30304.1	bacterioferritin comigratory protein, putative					Leptosprillum sp. Group II UBA
387	0	124516173	qB	EAY57681.1	putative peroxidoredoxin					Halohodospira halophila SL1
		121998910	ref	YP_001001697.1	redoxin domain-containing protein					Halohodospira halophila SL1
		121588315	qB	ABM60895.1	Redoxin domain protein					Halohodospira halophila SL1
388	4.80E-14	189424119	ref	YP_001951296.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Geobacter lovleyi SZ
		189420378	qB	ACD94776.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Geobacter lovleyi SZ
389	0	163938462	qB	YP_0016343346.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Bacillus weihenstephanensis KBAB4
		163936065	qB	ABY41718.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Bacillus weihenstephanensis KBAB4
390	3.08E-11	194570897	ref	YP_002105897.1	antioxidant. AhpC/TSA family					Burkholderia pseudomallei 406e
		217421736	ref	ZP_03453240.1	antioxidant. AhpC/TSA family					Burkholderia pseudomallei 406e
		157807504	qB	ED084874.1	antioxidant. AhpC/TSA family					Burkholderia pseudomallei 406e
391	0	119898354	ref	YP_933567.1	putative bacterioferritin comigratory protein					Azoarcus sp. BH72
		119670767	emb	CAI94680.1	putative bacterioferritin comigratory protein					Azoarcus sp. BH72
392	0	13541250	ref	NP_110838.1	peroxidoredoxin					Thermoplasma volcanium GSS1
393	5.18E-12	119720359	ref	YP_920630.1	redoxin domain-containing protein					Thermophilum pendens Hrk 5
		119525455	qB	ABL78827.1	Redoxin domain protein					Thermophilum pendens Hrk 5
394	1.87E-17	218441188	ref	YP_002379517.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Cyanothoe sp. PCC 7424
		18173916	qB	ACK72649.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Cyanothoe sp. PCC 7424
395	5.33E-14	91788060	ref	YP_549012.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Polaromonas sp. JS666
		91697285	qB	ABE44114.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Polaromonas sp. JS666
396	4.26E-14	83954335	ref	ZP_00963055.1	AhpC/TSA family protein					Sulfitobacter sp. NAS-14.1
		83841372	qB	EAP80542.1	AhpC/TSA family protein					Sulfitobacter sp. NAS-14.1
397	1.23E-10	207083464	qB	ED260890.1	bacterioferritin comigratory protein					Candidatus Pelagibacter sp. HTCC7211
398	1.16E-10	167888954	qB	ACA089747.1	AHP/TSA peroxidoredoxin					Pseudomonas putida
399	0	45948924	ref	XP_001702592.1	thioredoxin dependent peroxidase					Chlamydomonas reinhardtii
		158280614	qB	EDP06371.1	thioredoxin dependent peroxidase					Chlamydomonas reinhardtii
400	2.19E-09	15676648	ref	NP_273792.1	bacterioferritin comigratory protein					Neisseria meningitidis MC58
		7225979	qB	AAF41163.1	bacterioferritin comigratory protein					Neisseria meningitidis MC58
401	1.08E-10	16870190	ref	ZP_02734233.1	Redoxin					Gemmata obscuriglobus UGM 2246
402	0	39989536	ref	NP_954487.1	AhpC/TSA family protein					Geobacter sulfurreducens PCA
		39985493	qB	AAR38837.1	AhpC/TSA family protein					Geobacter sulfurreducens PCA
403	4.45E-11	114327505	ref	YP_744662.1	thioredoxin peroxidase					Granulibacter thebesdensis CGDNIH1
		1143115679	qB	AB161739.1	thioredoxin peroxidase					Granulibacter thebesdensis CGDNIH1
404	4.37E-12	194305516	ref	YP_002017310.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Pelodyctyon phaeoolithratiforme BU-1
		194307993	qB	ACF42693.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Pelodyctyon phaeoolithratiforme BU-1
405	7.36E-09	84999558	ref	XP_954500.1	Ahp/TSA family-related protein					Thelaira annulata
		65305498	emb	CAI73823.1	Ahp/TSA family-related protein, putative					Thelaira annulata
406	0	118617233	ref	YP_905565.1	peroxidoxin BcpB					Mycobacterium ulcerans Agy99
		183882424	ref	YP_001850715.1	peroxidoxin BcpB					Mycobacterium marinum M
		183175750	qB	ACC40860.1	peroxidoxin BcpB					Mycobacterium marinum M
407	0	88713522	ref	ZP_01107604.1	bacterioferritin comigratory protein					Flavobacteriales bacterium HTCC2170
		88708032	qB	EAR00270.1	bacterioferritin comigratory protein					Flavobacteriales bacterium HTCC2170
408	0	134097806	ref	YP_001103467.1	bacterioferritin comigratory protein					Saccharopolyspora erythraea NRRL 2338
		133910429	emb	CAM00542.1	bacterioferritin comigratory protein					Saccharopolyspora erythraea NRRL 2338
409	0	78779467	ref	XP_396579.1	putative bacterioferritin comigratory (BCP) protein					Prochlorococcus marinus str. MIT 9312
		78711966	qB	ABB49143.1	putative bacterioferritin comigratory (BCP) protein					Prochlorococcus marinus str. MIT 9312
410	2.80E-19	126658834	ref	ZP_01729978.1	bacterioferritin comigratory protein					Cyanothoe sp. CCY0110
		126619932	qB	EAZ906857.1	bacterioferritin comigratory protein					Cyanothoe sp. CCY0110
411	0	56479136	ref	YP_160725.1	alkyl hydroperoxide reductase					Azoarcus sp. Ebn1
		56315179	emb	CAI09824.1	alkyl hydroperoxide reductase					Azoarcus sp. Ebn1
412	4.34E-15	78356074	ref	YP_387523.1	bacterioferritin comigratory protein, putative					Desulfuobrio desulfuricans subs. desulfuricans str. G20
		78218479	qB	ABB37828.1	bacterioferritin comigratory protein, putative					Desulfuobrio desulfuricans G20
413	0	194017900	ref	ZP_03065608.1	antioxidant. AhpC/TSA family					Bacillus pumilus ATCC 7061
		194010366	qB	EDW19940.1	antioxidant. AhpC/TSA family					Bacillus pumilus ATCC 7061
414	1.82E-12	1105989146	ref	ZP_01386424.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Chlorobium ferrooxidans DSM 13031
		110340278	qB	EAT58775.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Chlorobium ferrooxidans DSM 13031
415	1.53E-12	196240724	qB	ZP_03139501.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Cyanothoe sp. PCC 7425
		196215184	qB	EDY08636.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Cyanothoe sp. PCC 7425
416	1.07E-09	167846542	ref	YP_001684205.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen					Caulobacter sp. K31

417	1.58E-13	167348972.1	ABZ71707.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Caulobacter sp. K31	YKGIIVYVYPRAMTGTCTEAVGVSTDKAKFKKFKH
418	2.94E-10	1264665303.ref	YP_001040412.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Staphylothermus marinus F1	YFYPKADTPGCTMIEGIGISPAISKFKSKRGQIGLHSA
419	8.69E-11	126014126.gb	ABN69504.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Staphylothermus marinus F1	YFYPKADTPGCTMIEGIGISPAISKFKSKRGQIGLHSA
420	0	154248760.ref	YP_001409585.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ferrobacterium nodosum RK17-B1	YFYPKADTPGCTMIEGIGISPAISKFKSKRGQIGLHSA
421	0	154752696.gb	ABS59928.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ferrobacterium nodosum RK17-B1	YFYPKADTPGCTMIEGIGISPAISKFKSKRGQIGLHSA
422	0	218767873.ref	YP_002343385.1	hypothetical protein NMA0963	Neisseria meningitidis Z2491	AAVAAYVYPKDSIPGATGTVVGIQRDKKIKVYGTES
423	0	110598541.ref	CAW08187.1	hypothetical protein NMA0963	Neisseria meningitidis Z2491	AAVAAYVYPKDSIPGATGTVVGIQRDKKIKVYGTES
424	0	110339845.gb	EA158351.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobium ferrooxidans DSM 13031	APAISALYFYPKADTPGCTEACGYSVDRKHKTEEKYQ
425	9.43E-13	216748172.ref	NP_662877.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobium ferrooxidans DSM 13031	APAISALYFYPKADTPGCTEACGYSVDRKHKTEEKYQ
426	0	21646030.gb	AAW73219.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Chlorobium tepidum TLS	IFYPGDDTIPVCTAQLCGJSGDSHKQFAEKHKLIARIDA
427	0	163976042.ref	YP_03403301.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Chlorobium tepidum TLS	IFYPGDDTIPVCTAQLCGJSGDSHKQFAEKHKLIARIDA
428	0	163219870.ref	YP_001837866.1	thioredoxin-dependent thiol peroxidase	Salmoneilla enterica subsp. enterica serovar Typh. str. AG3	LKAGDIASIPDYFYPKAMTPTGCTVQACGISTQSDKSPENS
429	0	189909938.ref	YP_001961563.1	putative peroxiredoxin Bcp (thioredoxin reductase, bacterioferritin comigratory protein)	Leptospira biflexa serovar Patoc strain Patoc 1 (Paris)	YFYPKADTPGCTEACGYSVDRKHKTEEKYQ
430	2.39E-11	167774674.gb	ABZ92919.1	Peroxiredoxin	Leptospira biflexa serovar Patoc strain Patoc 1 (Ames)	QNGVKRSTPGCTEACGYSVDRKHKTEEKYQ
431	0	167774674.gb	ABZ92919.1	putative peroxiredoxin Bcp (Thioredoxin reductase, Bacterioferritin comigratory protein)	Leptospira biflexa serovar Patoc strain Patoc 1 (Ames)	QNGVKRSTPGCTEACGYSVDRKHKTEEKYQ
432	0	148240508.ref	ABE11037.1	putative bacterioferritin comigratory protein	uncultured Prochlorococcus marinus clone ASNCT79	QNGVKRSTPGCTEACGYSVDRKHKTEEKYQ
433	0	147849047.emb	CAK24598.1	Peroxiredoxin	Synechococcus sp. WH 7803	YFYPKADTPGCTEACGYSVDRKHKTEEKYQ
434	3.68E-13	88803252.ref	YP_01118778.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Synechococcus sp. WH 7803	FFYPKASTPGCTNEACSEADTKKQNPPLADYDGIHRT
435	2.80E-14	187870176.gb	EAR119197.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Polianbacter igdensis 23-P	FFYPKASTPGCTNEACSEADTKKQNPPLADYDGIHRT
436	0	167593756.gb	ABZ285004.1	bacterioferritin comigratory protein	Helobacterium modesticaldum Ice1	YFYPKADTPGCTEACGYSVDRKHKTEEKYQ
437	3.25E-11	91783424.ref	YP_568630.1	putative bacterioferritin comigratory oxidoreductase	Helobacterium modesticaldum Ice1	YFYPKADTPGCTEACGYSVDRKHKTEEKYQ
438	0	168873768.gb	ABE30578.1	putative bacterioferritin comigratory oxidoreductase	Burkholderia xenovorans LB400	YFYPKADTPGCTEACGYSVDRKHKTEEKYQ
439	2.39E-15	170077726.ref	YP_001734364.1	bacterioferritin comigratory protein	Burkholderia xenovorans LB400	YFYPKADTPGCTEACGYSVDRKHKTEEKYQ
440	1.03E-14	218440561.ref	ACQ499108.1	bacterioferritin comigratory protein	Synechococcus sp. PCC 7002	DEGKTVSYFYPKADTPGCTEACGYSVDRKHKTEEKYQ
441	2.30E-15	163788318.ref	ACK72022.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanobacter sp. PCC 7424	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
442	0	159878638.gb	EDP70696.1	bacterioferritin comigratory protein	Flavobacteriales bacterium AL-1	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
443	0	217499102.gb	ACK46295.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Flavobacteriales bacterium AL-1	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
444	0	154501541.ref	ED_02039242.1	hypothetical protein BACCAP_04894	Shewanella baltica OS223	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
445	1.13E-12	146303540.ref	YP_001190856.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacteroides capillosus ATCC 29799	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
446	3.70E-11	46202189.ref	ZP_00208423.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bacteroides capillosus ATCC 29799	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
447	4.45E-16	212694173.ref	YP_03302301.1	hypothetical protein BACDOR_03699	Bacteroides dorei DSM 17855	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
448	0	149385426.gb	ABN64859.2	predicted protein	Pichia stipitis CBS 6054	PPKRAAKTISLAYPKASTPGCTEACGYSVDRKHKTEEKYQ
449	0	54208729.gb	AAV31124.1	bacterioferritin comigratory protein	Pichia stipitis CBS 6054	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
450	0	197786108.ref	YP_002208683.1	bacterioferritin comigratory protein	Yersinia ruckeri	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
451	0	197928702.ref	YP_03192996.1	hypothetical protein SsvA_05325	Streptomyces svicicus ATCC 29083	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
452	0	197710462.gb	EDY54496.1	bacterioferritin comigratory protein	Streptomyces svicicus ATCC 29083	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
453	0	134095336.ref	YP_001100413.1	bacterioferritin comigratory protein (blue copper protein like)	Herminimonas arsenicoxydans	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
454	0	13373924.1.emb	CAL62290.1	putative peroxiredoxin Bcp (Thioredoxin reductase) (Bacterioferritin comigratory protein)	Herminimonas arsenicoxydans	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
455	0	116071418.ref	ZP_01468687.1	putative bacterioferritin comigratory protein (BCP) protein	Synechococcus sp. BL107	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
456	0	90019288.gb	ABD84295.1	unknown	Synechococcus sp. BL107	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
457	2.56E-14	196192986.gb	EDX87945.1	antioxidant, hApcTSA family	Yersinia sp. MH-1	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
458	3.90E-14	206877905.gb	ED242392.1	bacterioferritin comigratory protein	Alcanivorax sp. DG881	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
459	1.08E-11	124516013.gb	EAJ75752.1	Peroxiredoxin	Rhodobacterales bacterium HTCC2083	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
460	3.93E-13	46449641.ref	YP_010035.1	bacterioferritin comigratory protein, putative	Desulfotribium vulgare subsp. vulgare str. Hildenborough	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
461	0	15893013.ref	NP_360727.1	bacterioferritin comigratory protein	Rickettsia conorii str. Malish 7	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
462	0	15820213.gb	AAU03628.1	bacterioferritin comigratory protein	Rickettsia conorii str. Malish 7	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
463	2.49E-10	77966572.ref	YP_368544.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia sp. 383	LVAGHAIYFYPKADTPGCTEACGYSVDRKHKTEEKYQ
464	0	77966572.ref	YP_368544.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia sp. 383	LVAGHAIYFYPKADTPGCTEACGYSVDRKHKTEEKYQ
465	1.09E-13	782129316.gb	YP_381715.1	twin-arginine translocation pathway signal	Synechococcus sp. CC9605	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
466	0	110638985.ref	ABR35180.1	bacterioferritin comigratory protein	Synechococcus sp. CC9605	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
467	0	110279686.gb	ABG57852.1	bacterioferritin comigratory protein	Cytophaga hutchinsonii ATCC 33406	QNGKIVSYFYPKADTPGCTEACGYSVDRKHKTEEKYQ
468	1.19E-10	148548508.ref	YP_001266610.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas putida F-1	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
469	0	167035176.ref	YP_001670407.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas putida GB-1	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
470	0	148510566.gb	ABO77426.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas putida GB-1	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
471	0	166861664.gb	ABZ20072.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	uncultured bacterium BAC13K9BAC	FFYPKASTPTGCTVEACGYSVDRKHKTEEKYQ
472	1.13E-11	68304923.gb	AAV789934.1	predicted bacterioferritin comigratory protein XF0861	Parabacteroides distasonis ATCC 8503	YKGRKVAIYFYPKADTPGCTEACGYSVDRKHKTEEKYQ
473	4.62E-14	150009087.ref	YP_001302830.1	putative bacterioferritin co-migratory protein	Parabacteroides distasonis ATCC 8503	YKGRKVAIYFYPKADTPGCTEACGYSVDRKHKTEEKYQ



455	5.00E-12	149933208.1	ABR43208.1	putative bacterioferritin co-migratory protein	Parabacteroides distasonis ATCC 8503	LFYPLDFSPVCSLQLPstidstSHKAFSEQLGkagllrh
456	0	159899991.1	ref YP_001648158.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Herpetosiphon aurantiacus ATCC 23779	YFYPKDNTPGCTKEAAGyvtstSHQKFKTEKFAleglaq
457	2.86E-11	159899991.1	ref YP_001648158.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Herpetosiphon aurantiacus ATCC 23779	YFYPKDNTPGCTKEAAGyvtstSHQKFKTEKFAleglaq
458	3.24E-15	37521945	ref NP_925322.1	bacterioferritin comigratory protein	Gloeobacter violaceus PCC 7421	YFYPKDNTPGCTTEGLgvrsdSHDSFCAKQGlglers
459	0	35212944	dbj BAC90317.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Gloeobacter violaceus PCC 7421	YFYPKDNTPGCTTEGLgvrsdSHDSFCAKQGlglers
460	0	71898917	ref ZP_00681084.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xylella fastidiosa Ann-1	QNGDQRSfykddlbgdcaaacGVSGGbsnrfaehts
461	5.54E-12	78184889	ref EAO33393.1	putative bacterioferritin comigratory protein	Xylella fastidiosa Ann-1	SLSDFAGKQVYypkamtbgctkeacGlsPdvagvfrs
462	0	78184889	ref EAO33393.1	putative bacterioferritin comigratory protein	Xylella fastidiosa Ann-1	SLSDFAGKQVYypkamtbgctkeacGlsPdvagvfrs
463	0	78184889	ref EAO33393.1	putative bacterioferritin comigratory protein	Xylella fastidiosa Ann-1	SLSDFAGKQVYypkamtbgctkeacGlsPdvagvfrs
464	3.36E-10	19553688	ref NP_0011690.1	bacterioferritin comigratory protein	Synechococcus sp. CC9902	YFYPKDNTPGCTTEAGglspsdSHEKFSKFDyglirs
465	1.38E-14	14529649	ref YP_001139312.1	hypothetical protein cgr_2402	Corynebacterium glutamicum R	FFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
466	1.21E-10	88702107	dbj EAO9210.1	bacterioferritin comigratory protein	Corynebacterium glutamicum R	FFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
467	0	94885089	ref YP_604459.1	redoxin	Ganma proteobacterium KT.71	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
468	6.96E-11	149933208.1	ref YP_001224959.1	bacterioferritin comigratory protein	Congregibacter litoralis KT71	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
469	1.04E-15	90407443	ref ZP_01215627.1	Bcp protein	Deinococcus geothermalis DSM 11300	LVAAAAYhprftsgcteahLTLEFQKLNcaisad
470	2.12E-14	90311474	dbj EAS39575.1	Bcp protein	Deinococcus geothermalis DSM 11300	LVAAAAYhprftsgcteahLTLEFQKLNcaisad
471	0	217031895	ref ZP_03437397.1	hypothetical protein HPB128_3g14	Leptospira interrogans serovar Lai str. 56601	LPEISLEVYypkddlbgctkeacGlsLdshngllqkys
472	0	108562589	ref YP_626875.1	bacterioferritin comigratory protein	Leptospira interrogans serovar Lai str. 56601	LPEISLEVYypkddlbgctkeacGlsLdshngllqkys
473	1.85E-14	75906660	ref YP_320956.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Leptospira interrogans serovar Lai str. 56601	LPEISLEVYypkddlbgctkeacGlsLdshngllqkys
474	0	116073851	ref ZP_01471113.1	putative bacterioferritin comigratory protein	Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	FFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
475	0	110638282	ref YP_67850.1	bacterioferritin comigratory protein	Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	FFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
476	1.82E-13	110280973	dbj ABG59159.1	bacterioferritin comigratory protein	Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	FFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
477	9.36E-17	217038608	ref YP_002334524.1	bacterioferritin comigratory protein	Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	FFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
478	4.19E-13	17203821	ref YP_001802712.1	probable bacterioferritin comigratory protein	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
479	1.24E-12	171697665	dbj ACB50646.1	probable bacterioferritin comigratory protein	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
480	0	119469474	ref ZP_01612378.1	bacterioferritin comigratory protein	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
481	6.29E-14	169947542	ref YP_001944071.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
482	0	106230699	ref ZP_03293556.1	hypothetical protein CLOH1R_01506	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
483	0	160937825	ref ZP_02085233.1	hypothetical protein CLOBOL_02769	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
484	5.39E-14	158439101	dbj EDP16895.1	putative alkyl hydroperoxide reductase	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
485	0	120436134	ref YP_861820.1	putative alkyl hydroperoxide reductase	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
486	0	75906419	ref YP_320715.1	peroxiredoxin Bcp	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt
		75700144	dbj ABA119820.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthomonas campestris pv. campestris str. 8004	YFYPKDDITGCTAESLgmspdCHDKFKIKHRIHgvrt

487	1.78E-15	15790265 ref NP_280089.1	hypothetical protein VNG1197G		Halobacterium sp. NRC-1	YFYPRADTPGCTSEAGjsdtdELAAAFKDKYNlaaetda
		1692335996 ref YP_0016389196.1	peroxiredoxin (thioredoxin-dependent hydroperoxide peroxidase)		Halobacterium salinarum R1	
		10580729 gb AAG19569.1	bacterioferritin comigratory protein		Halobacterium sp. NRC-1	
		167727062 emb CAP_19347.1	peroxiredoxin (thioredoxin-dependent hydroperoxide peroxidase)		Halobacterium salinarum R1	
488	4.89E-16	322665609 ref NP_86054.1	bacterioferritin comigratory protein Bcp		Helicobacter hepaticus ATCC 51449	YFYPKDNTIPGCTIEAEGispsdCHQNFINKKAvglirs
		32262560 gb AAF77607.1	bacterioferritin comigratory protein Bcp		Helicobacter hepaticus ATCC 51449	
489	0	144032233 gb EEB73063.1	bacterioferritin comigratory protein		Thermococcus sp. AM4	YFYPKDNTIPGCTTEAKGvsrdSHARFKERHSveqairs
490	1.15E-17	168030229 ref XP_001076726.1	predicted protein		Physcomonella patens subsp. patens	YFYPADESPTAQACgvsrgdSHKAFKAKYRepekthia
		162881155 gb ED067585.1	predicted protein		Physcomonella patens subsp. patens	
491	1.13E-12	1186602613 ref YP_903928.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Candidatus Ruthia magnifica str. Cm (Calyplogena magnifica)	YFYPKDAITPGCTTEGGvsykdIKHEFKAKQNYmgivrs
		118667552 gb ABL02357.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Candidatus Ruthia magnifica str. Cm (Calyplogena magnifica)	
492	3.72E-10	219119839 ref XP_002180671.1	predicted protein		Phaeodactylum tricornutum CCAP 1055/1	PLPAFAVPVTVYppgatskgtclearGVSVdlygsals
		217408144 gb EEC48079.1	predicted protein		Phaeodactylum tricornutum CCAP 1055/1	
493	3.90E-11	167838103 ref ZP_02462986.1	antioxidant. AhpC/TSA family protein		Burkholderia thailandensis MSMB43	YFYPAAFITGCTIEAhtgvsadKLPAlSKANRwaaahrq
494	5.08E-11	11395519 ref YP_730606.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Synechococcus sp. CC9311	LLAPTRVYfydrfsgtcleahSLSAFNKSGAalbad
		113882470 gb ABL47428.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Synechococcus sp. CC9311	
495	2.64E-11	126548037 ref NP_86307.1	conserved hypothetical protein		Streptomyces ambifaciens ATCC 23877	FFYPAALTSGCTAEACgvsrdLFGVRRGmsahdrad
496	0	33861460 ref CAJ89752.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Prochlorococcus marinus subsp. pastoris str. COMP1986	LEGINKSYfypkdlpdkleaqGVMSIDshkfkfkyg
		33634037 emb CAE18962.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Prochlorococcus marinus subsp. pastoris str. COMP1986	ASASARtAsyprantsgcttqakGLSNpslsswsls
497	0	148928977 ref ZP_01810653.1	bacterioferritin comigratory protein like protein		Campylobacter jejuni subsp. jejuni CG8486	YFYPKDNTIPGCTTEACgjspsdSHEKFSKFDyegllrs
		145844385 gb EDK21494.1	bacterioferritin comigratory protein		Campylobacter jejuni subsp. jejuni CG8486	
498	0	194427385 ref ZP_03059935.1	peroxiredoxin		Escherichia coli B171	YFYKAMTIPGCTVQAACglsdqKLSRFAEKELydgihri
		194414706 gb EDX30978.1	peroxiredoxin		Escherichia coli B171	
499	1.15E-14	196183773 gb EDX78756.1	antioxidant. AhpC/TSA family		Microcoleus chthonoplastes PCC 7420	LAGKTVAfypkdlpdkleaqGVMSIDshkfkfkyg
500	2.94E-09	71021535 ref XP_760998.1	hypothetical protein UM04851.1		Ustilago maydis 521	ASASARtAsyprantsgcttqakGLSNpslsswsls
		46100862 gb IEAK86115.1	hypothetical protein UM04851.1		Ustilago maydis 521	
501	1.16E-10	28950134 emb CAD70992.1	conserved hypothetical protein		Neurospora crassa	APVKKRAskkkiveeskfTYPKASTIPGCTRQVYcgjsad
		30260694 ref NP_84307.1	bacterioferritin comigratory protein		Bacillus anthracis str. Ames	YFYPKDNTIPGCTTEACgvsyglteqktGVSPDymglers
502	0	47525807 ref YP_017156.1	bacterioferritin comigratory protein		Bacillus anthracis str. Ames	
		165870771 ref ZP_02215430.1	bacterioferritin comigratory protein		Bacillus anthracis str. Ames Ancestor	
503	167634700 ref ZP_02393019.1	167634700 ref ZP_02393019.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0448	
		167640811 ref ZP_02399070.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0193	
		170686596 ref ZP_02879802.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0465	
		170707203 ref ZP_02897659.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0389	
		177655118 ref ZP_02936748.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0174	
		190688197 ref ZP_03021106.1	bacterioferritin comigratory protein		Bacillus anthracis T.sankovskii-I	
		196039752 ref ZP_03102140.1	bacterioferritin comigratory protein		Bacillus cereus W	
		218901677 ref YP_002449511.1	bacterioferritin comigratory protein		Bacillus cereus AH820	
		30254082 gb AAF24557.1	bacterioferritin comigratory protein		Bacillus anthracis str. Ames	
		47500955 gb AA129631.1	bacterioferritin comigratory protein		Bacillus anthracis str. Ames Ancestor	
		164713611 gb EDR19135.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0488	
		167511205 gb EDR86592.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0193	
		167529774 gb EDR92522.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0442	
		170127991 gb ED598852.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0389	
		170667456 gb EDT18213.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0465	
		172080267 gb ED1166357.1	bacterioferritin comigratory protein		Bacillus anthracis str. A0174	
		190560689 gb EDV14665.1	bacterioferritin comigratory protein		Bacillus anthracis T.sankovskii-I	
		195892775 gb EDX56735.1	bacterioferritin comigratory protein		Bacillus cereus W	
		218535016 gb ACK87414.1	bacterioferritin comigratory protein		Bacillus cereus AH820	
503	3.27E-14	167042601 gb ABZ07324.1	putative AhpC/TSA family protein		Burkholderia cenocepacia HF4000_ANIWI13316	YFYPKDFTPGCTIEADgjskdsHKHFCEKMKymglirs
504	2.94E-11	206560300 ref YP_002231064.1	AhpC/TSA family protein		uncultured marine crenarchaeote J2315	SLSDLKGKKLYfypkdlpdkleaqGVSPDymglers
		198036341 emb CAR52237.1	AhpC/TSA family protein		Burkholderia cenocepacia J2315	
505	0	56419012 ref YP_146330.1	bacterioferritin comigratory protein		Geobacillus kaustophilus HTA426	YFYPKDNTIPGCTAEACgvsrdRHEAFIEKYEymglids
		49718854 dbj BAD74762.1	bacterioferritin comigratory protein		Geobacillus kaustophilus HTA426	
506	0	56183532 ref YP_026784.1	bacterioferritin comigratory protein		Bacillus anthracis str. Sterne	YFYPKDNTIPGCTTEACgvsyglteqktGVSPDymglers
		52144776 ref YP_082052.1	bacterioferritin comigratory protein		Bacillus anthracis str. Sterne	
		49177459 gb AA152835.1	bacterioferritin comigratory protein		Bacillus anthracis str. Sterne	
		51978245 gb AAU19795.1	bacterioferritin comigratory protein		Bacillus cereus E33L	
507	5.82E-15	159027724 emb CA089593.1	unnamed protein product		Microcystis aeruginosa PCC 7806	YFYPKDDITPGCTKQACgvsrdSHAQFKEKYSmshas
		126661731 ref ZP_01732730.1	bacterioferritin comigratory protein		Flavobacterium bacterium BAL38	FFYPKASTIPGCTAEACgvsrdAQAKFIDIKYEydgihri
508		126625170 gb EA295799.1	bacterioferritin comigratory protein		Flavobacterium bacterium BAL38	
509	0	75324715 sp Q6UBJ3.1	PERQ_SJASA RecName: Full=Peroxiredoxin Q, chloroplastic; AlhNal		Suaeda salsa	YKASIVayfpadetpdkqacGSGDshkafkkyk
		34420938 gb AA067661.1	peroxiredoxin Q		Suaeda salsa	
510	5.28E-15	82751517 ref YP_417258.1	bacterioferritin comigratory protein		Staphylococcus aureus RF122	LKGKKTlyfypdrtpctteacGSGDhnmfnkthrg
		82857048 emb CAI81485.1	probable bacterioferritin comigratory protein		Staphylococcus aureus RF122	
511	0	15613511 ref NP_241814.1	bacterioferritin comigratory protein		Bacillus halodurans C-125	YFYPKDNTIPGCTTEACgvsydrHKKFIEKYSymglers
		10173563 dbj BA064667.1	bacterioferritin comigratory protein		Bacillus halodurans C-125	
512	1.12E-12	183601582 ref ZP_02962952.1	thioredoxin peroxidase		Bifidobacterium animalis subsp. lactis HN019	ALADFKHQNYYfypkagvsctreakGISPDmiflis
		183219188 dbj ED189829.1	thioredoxin peroxidase		Bifidobacterium animalis subsp. lactis HN019	
513	1.01E-16	149372354 ref ZP_01891542.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		unidentified eubacterium SCB49	YFYPKNFTPGCTAEACgjsdssSHKFKASKFNlpgref
		149354744 gb EDIV43307.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		unidentified eubacterium SCB49	

514	0	149278862	ref	ZP_01884997.1	bacterioferritin comigratory protein	Pedobacter sp. BAL39	FKGKKVYfypkdmtpgdaaacGVSDshqkfaakhs
515	0	149230481	db	EDM355665.1	bacterioferritin comigratory protein	Pedobacter sp. BAL39	
516	0	169823834	ref	YP_001658092.1	putative peroxiredoxin bcp	Lysinibacillus sphaericus C3-41	YFYPKDMITPGCTTEACGvpsptkHTKFDKHGmgliers
517	0	168990422	gb	ACA37982.1	putative peroxiredoxin bcp	Lysinibacillus sphaericus C3-41	
518	0	154747936	ref	YP_001408107.1	bacterioferritin comigratory protein	Campylobacter hominis ATCC BAA-381	YFYPKDNITPGCTTEACGvpsdSHANFAAKOSV/gvirs
519	0	153603945	gb	ABS509592.1	bacterioferritin comigratory protein	Campylobacter hominis ATCC BAA-381	
520	0	109626366	emb	CAJ52825.1	peroxiredoxin (thioredoxin-dependent hydroperoxidase)	Haloquadratum walsbyi DSM 16790	EPGSSAPYfpradtpgctgcaGisDDdidaianeyd
521	0	152974291	ref	YP_001373808.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	YFYPKDDITPGCTKEACGvpsdkHKQFKYAKYEvqkqliq
522	0	56752286	ref	YP_172897.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	
523	0	81300615	ref	YP_400823.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	
524	0	56687255	dbj	BAD80477.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	
525	0	81169486	gb	ABB57836.1	bacterioferritin comigratory protein	Synechococcus elongatus PCC 6301	
526	0	152974291	ref	YP_001373808.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Bacillus cereus subsp. cytotoxic NVH 391-98	YFYPKDMITPGCTTEACGvpsdRHVKFIEKHHEymgliers
527	0	152023043	gb	ABS20813.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Bacillus cereus subsp. cytotoxic NVH 391-98	
528	0	152974291	ref	YP_001373808.1	thioredoxin-dependent thiol peroxidase	Actinobacillus succinogenes 1302	YFYPKALITPGCTTQAACgispdkLAQFEFKQAYdghlri
529	0	150837986	gb	ABRR73757.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Actinobacillus succinogenes 1302	
530	0	152989164	ref	YP_001340999.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Actinobacillus succinogenes 1302	YFYPKDDITPGCTTQAACGjstqkQHNQFIKAKYDgvsdli
531	0	150837088	gb	ABRR71084.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Actinobacillus succinogenes 1302	
532	2.28E-18	189467480	ref	ZP_03016265.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Marinomonas sp. MWYL1	YFYPKDMITSGCTTQAACGvpsdSHQKFEIKENnegvleri
533	6.61E-14	189435744	gb	EDV04729.1	hypothetical protein BACINT_03869	Marinomonas sp. MWYL1	
534	4.85E-12	121601658	ref	YP_989095.1	putative bacterioferritin	Bacteroides intestinalis DSM 17393	YFYPKADITPGCTKEAlyvsaaAQDKFKTKYTyngysra
535	0	50307441	ref	XP_453899.1	putative bacterioferritin	Azorhizobium caulinodans ORS 571	
536	0	78777927	ref	YP_394312.1	thioredoxin family protein	Azorhizobium caulinodans ORS 571	
537	0	28199812	ref	YP_779926.1	thioredoxin family protein	Bartonella bacilliformis KC583	YFYPKDDITSGCTTREAIGispdkHDKFKTKHKVaaara
538	0	182682354	ref	YP_001830514.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Sulfurimonas denificans DSM 1251	YFYPKDDITSGCTTREAIGispdkHDKFKTKHKVaaara
539	0	2805727	gb	AAO29575.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Sulfurimonas denificans DSM 1251	YFYPKDDITSGCTTREAIGispdkHDKFKTKHKVaaara
540	0	182682354	ref	YP_001830514.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Xylella fastidiosa Temecula1	YFYPKDDITSGCTTREAIGispdkHDKFKTKHKVaaara
541	1.20E-13	148361150	ref	YP_001252357.1	bacterioferritin comigratory protein	Xylella fastidiosa M23	YFYPKADITPGCTTEGGjstqkSHQEFKSKONvrgliers
542	1.78E-10	163856793	ref	YP_001631091.1	peroxiredoxin	Legionella pneumophila str. Corby	
543	0	50307441	ref	XP_453899.1	bacterioferritin comigratory protein	Legionella pneumophila str. Corby	
544	0	49642833	emb	CAH07095.1	unnamed protein product	Bordetella pertussis DSM 12804	LRRSNRisikevasknkFAYPKASITPGCTRQACgilead
545	0	193216036	ref	YP_001896235.1	KLLA0D14333p	Bordetella pertussis Thernema 1	
546	1.17E-10	87124435	ref	ZP_01080284.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Kluveromyces laevis	YFYPKDDITPGCTTEACGvpsdSHKHDFRETHkksghlrik
547	0	163260521	emb	CAP42823.1	Twin-arginine translocation pathway signal protein	Kluveromyces laevis	
548	0	50307441	ref	XP_453899.1	unnamed protein product	Kluveromyces laevis	
549	0	197770492	ref	YP_002193487.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Kluveromyces laevis	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
550	0	197703534	gb	EDY49346.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	
551	0	1577939064	ref	YP_001490748.1	bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
552	0	15769918	gb	ABV68078.1	bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	
553	0	33692429	ref	NP_880073.1	putative bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
554	0	33601857	ref	NP_889417.1	putative bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	
555	0	33572074	emb	CAE41603.1	putative bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
556	0	33572074	emb	CAE41603.1	putative bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	
557	0	21226951	ref	NP_632873.1	bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
558	0	20905263	gb	AAAM30545.1	Bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
559	0	11016845	gb	ABG52986.1	Redoxin	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
560	0	15922087	ref	NP_377766.1	bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
561	0	15351124	ref	YP_772963.1	Redoxin	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
562	0	11528112	gb	ABI86629.1	Redoxin domain protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
563	0	198263081	gb	EDY87359.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
564	0	33519867	ref	NP_878799.1	thioredoxin-dependent thiol peroxidase	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
565	0	33504313	emb	CAJ083205.1	bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
566	0	170746226	ref	YP_001754486.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
567	0	170554748	gb	ACB23803.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
568	0	78184653	ref	YP_377088.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
569	0	78189847	gb	ABB26044.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
570	0	148555089	ref	YP_001262851.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
571	0	148500259	gb	ABO68513.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
572	0	160872284	ref	ZP_02062396.1	bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
573	0	159121063	gb	EDP46401.1	bacterioferritin comigratory protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
574	0	119944600	ref	YP_942370.1	bacterioferritin comigratory protein (Bcp)	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
575	0	119663284	gb	ABM02771.1	bacterioferritin comigratory protein (Bcp)	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit
576	0	52843036	ref	YP_096835.1	peroxiredoxin, AhpC/ISA family protein	Streptomyces clavuligerus ATCC 27064	YFYPKDDITPGCTTEAGvpsdkLAKFREKENygvit



581	9.56E-15	159901222 ref	YP_001547469.1	peroxidexin			Herpetosiphon aurantiacus ATCC 23779	YFYPKDDTTPGCTTQACGvspsdSHQKFKTKfDfmgvYvtrs
582	7.94E-14	70803910 db	ABX073341.1	Peroxiredoxin			Herpetosiphon aurantiacus ATCC 23779	YFYPKATFTPGCTREIlgvsvdTQKSFADKCGleiktr
583	2.39E-11	6860658 gb	AA7194487.1	2-cys peroxidexin			Sulfobobus acidocaldarius DSM 639	YFYPKDDTTPGCTTQAAHhlafaeatGVSKDmgiera
584	6.88E-11	159043727 ref	YP_001532521.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Dinoroseobacter shibae DFL 12	YFYPKDDTTPGCTTEGLGvsrdSHDNFCAKGGVglers
585	3.46E-13	21242503 ref	ABV92920.0	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Xanthomonas axonopodis pv. citri str. 306	YFYPKDDTTPGCTTEACEapdlDAIIGHkhrshfkgd
586	0	20708574 gb	EED263068.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Alcyobacillus acidocaldarius LAA1	YFYPKDDTTPGCTTEACEapdlDAIIGHkhrshfkgd
587	0	66819743 gb	XP_643530.1	AlpC/TSA family protein			Campylobacteriales bacterium GD 1	GVIILISkdfakvYFYPKDDTTPGCTKEACGvsdd
588	0	187604333 ref	XP_643628.1	AlpC/TSA family protein			Dicystostellium discoideum AX4	YFYPKDDTTPGCTTEACGvsdtkQNFIAKNDvvaars
589	1.91E-15	39935622 ref	NP_947798.1	bacterioferitin co-migratory protein			Rhodospseudomonas palustris CGA009	KTSATKSSATfYpkiptkpaqdgreaIGVSAIdlqgilt
590	8.51E-12	50421939 ref	XP_485960.1	possible bacterioferitin co-migratory protein			Rhodospseudomonas palustris CGA009	FAYPKASITPGCTRQVQvsadKVKKIAIseskgaepng
591	1.97E-11	126739329 ref	XP_01755022.1	DEHA2E05544p			Debaromyces hansenii	FFYPRDDTTPGCTKEShlnqafadattGISKDNhwglers
592	3.28E-11	171317889 ref	XP_02907066.1	AlpC/TSA family protein			Roseobacter sp. SK209-2-6	YFYPKDDTTPGCTTEGLGvsrdSHDNFCAKLEvrglers
593	5.97E-11	182677014 ref	YP_001831160.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Burkholderia ambifaria MEX-5	SLADFAGKLYfypkddtsqctkeatGLKGDpsvashwk
594	6.49E-15	198270645 ref	XP_03209176.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Bejerinckia indica subsp. indica ATCC 9039	YFYPKDDTTPGCTTAQACGvsrlnSHQKfIEKKNQeeglier
595	3.34E-11	158317932 ref	YP_001510440.1	hypothetical protein BACP1E_02841			Bacteroides plebeius DSM 17735	AFYFGDNTIPVCTKQMGvspsdHEAFARFVSgdlrs
596	0	753363180 sb	O9MB35.1	PERO_SEDL1 RecName: Full=Peroxidexin Q, chloroplastic; AltName= Peroxidexin Q			Frankia sp. EAN1pec	LKFSHASfYpadeitpgctkqcaGISGDshhkaafakyy
597	3.75E-17	163847593 ref	YP_001635607.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Sedum lineare	YFYPKDDTTPGCTSOACGvspsdSHAKFKTKfHNMvgllrs
600	0	187699071 ref	YP_029853005.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Chloroflexus aurantiacus J-10-fl	QLASLRYfypkddtppgctkeacGISKDShtfinkfyq
601	0	124021974 ref	YP_001016281.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Chloroflexus sp. Y-400-fl	WP6KAQAYfypkddtppgctkeacGISADghrsreviewel
602	1.03E-13	123962260 gb	ABM77016.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Synechococcus sp. WH 5701	DPAPTRfYfypkdsipgdtscGVSRSdngntfekaa
603	9.43E-13	87282605 gb	EAQ74863.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Mariplundus ferrooxidans PV-1	YFYPKDDTTPGCTVEAGvsytdQQAQFRDRCCjpsgdra
604	1.18E-10	158063228 ref	NP_204933.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Derooccus radiotrans R1	YFYPKDDTTPGCTTREAEGvsrdSHANFRKKYQmgllrs
605	1.02E-14	6458949 gb	AAF10779.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Anaplasma marginale str. St. Maries	YFYPKDDTTPGCTTQAAHhlafaeatGVSKDmgiera
606	1.07E-12	109625661 emb	CAJ52092.1	peroxidexin-like protein			Haloquadratum walsbyi DSM 16790	LVSLSLlyfypkdfatgactekELKDKF5KYNjgsad
607	8.61E-17	126696234 ref	YP_001091180.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Prochlorococcus marinus str. MIT 9301	LPSSGGAfYfypkddtppgctkeacGVSSDshhkaftkhr
608	0	126543337 ref	ABO17579.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Cyanothece sp. PCC 7425	FFYPRDDTTPGCTKEShlnqafadattGISKDNhwglers
609	1.83E-11	99080932 ref	YP_613086.1	redoxin			Silicibacter sp. TM1040	YFYPKDDTTPGCTTEGGvsrdsSHEKFKAKMnvgldtrs
610	1.74E-12	82703066 ref	YP_412632.1	Redoxin			Nitrosospora multiformis ATCC 25196	YFYPKDDTTPGCTKQACGvsndVIGISRDSshadfinkyd
611	0	169334264 ref	AB875240.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Anaerostipes stercoriformis DSM 17244	LLGGGAAYfypkddtppgctkeacGVSSDshhkaftkhr
612	3.21E-13	162453285 ref	YP_001615662.1	hypothetical protein ANASTE_00662			Sorangium cellulosum 'So ce 56'	LAKKKVlyfypkddtppgctkeacGVSSDshhkaftkhr
613	3.87E-09	154253708 ref	YP_001444532.1	bacterioferitin co-migratory protein			Sorangium cellulosum 'So ce 56'	YFYPKDDTTPGCTKQACGvspsdSHANFRKKYQmgllrs
614	0	54023231 ref	YP_117473.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Nocardia farcinica IFM 10152	LKGGKAYfypkddtppgctkeacGVSSDshhkaftkhr
615	4.33E-15	49486681 ref	YP_043902.1	AlpC/TSA family protein			Staphylococcus aureus subsp. aureus MSSA476	QTGTVRSfYpaaimgtckqcaGISDtkqarfadqr
616	0	49245124 emb	CAC43590.1	AlpC/TSA family protein			Staphylococcus aureus subsp. aureus MSSA476	
616	0	126435649 ref	YP_0010717340.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mal allergen			Mycobacterium sp. JLS	



645	0	72162759	ref	YP_290416.1	bacterioferritin comigratory protein	<i>Thermobifida fusca</i> YX	YFYPAAMTPGCTTQAACgspdrLAKFAEQEGvqgvrfs
646	6.44E-12	71916491	db	AAZ563933.1	bacterioferritin comigratory protein	<i>Thermobifida fusca</i> YX	YFYPKDSTPGCTEGQgysvskKHFKKAKONymgvrfs
647	0	148244707	ref	YP_001219401.1	AhpC/TSA family peroxidoredoxin	<i>Candidatus Vesicomomyces okutanii</i> HA	YFYKAMTPGCTVQAACglsctdKLSRFAEKELydgihrt
648	1.67E-13	188533210	ref	YP_001907007.1	putative peroxidoredoxin	<i>Erwinia tasmaniensis</i> Et1799	SLGDFKGGKkVypkamipgpcivqaeGVSVDydgihrt
649	0	188028252	emb	CA096110.1	bacterioferritin comigratory protein	<i>Vibrio</i> sp. MED222	SLKQFRDEKkNypkamipgpcivqacGVPDdlglhks
650	2.79E-12	86605608	ref	YP_47371.1	antioxidant, AhpC/TSA family protein	<i>Synechococcus</i> sp. JA-3-3Ab	YFYPRDFTAGCTIEARgvsadsSHRRFCSAEgpegjlira
651	5.20E-13	3242986	db	ABC99108.1	antioxidant, AhpC/Tsa family	<i>Synechococcus</i> sp. JA-3-3Ab	FTYPKANTPGCTKQAEglsadEDTKRSkwtkklkkt
652	4.99E-13	210463622	ref	YP_03266851.1	merozole caping protein-1	<i>Plasmodium falciparum</i>	YFYPKDDTSGCTAEAlkaidrdbfbesGISPdekglraq
653	7.42E-15	197745682	ref	YP_002169316.1	bacterioferritin comigratory protein	<i>Candidatus Liberibacter asiaticus</i> str. psy62	SLSDFKGGKkNypkamipgpcivqagISIPDydgihrt
654	0	150025173	ref	EDN35364.1	hypothetical protein FTGC_01118	<i>Francisella tularensis</i> subsp. novicida GA99-3549	FFYPKANTPGCTAEACgvsadTQLKFKFKFNydgihrt
655	3.78E-16	149771714	emb	CAL43188.1	probable peroxidoredoxin	<i>Flavobacterium psychrophilum</i> JIPO2/86	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
656	0	81300751	ref	YP_400959.1	bacterioferritin comigratory protein	<i>Synechococcus elongatus</i> PCC 6301	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
657	0	56687120	dbj	BAD80342.1	bacterioferritin comigratory protein homolog	<i>Synechococcus elongatus</i> PCC 6301	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
658	0	81169632	db	ABR57972.1	bacterioferritin comigratory protein-like	<i>Synechococcus elongatus</i> PCC 6301	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
659	0	166368834	ref	YP_0016661107.1	bacterioferritin comigratory protein	<i>Microcystis aeruginosa</i> NIES-843	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
660	8.07E-17	166091207	dbj	BAG05915.1	bacterioferritin comigratory protein	<i>Microcystis aeruginosa</i> NIES-843	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
661	4.49E-10	119510322	ref	YP_01629458.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Nodularia spumigena</i> CCY9414	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
662	0	119465066	db	EAIV45967.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	<i>Nodularia spumigena</i> CCY9414	YFYPKDDTPGCTIEACgvsdsSHQRFAQKYNslnrlrs
663	0	158334340	ref	YP_001516512.1	bacterioferritin comigratory protein	<i>Acaerochloris marina</i> MBIC11017	YFYPRDNTPGCTKEACgvsdsSHQRFAQKYNslnrlrs
664	0	160914243	ref	YP_02076464.1	hypothetical protein EUBDOL_00253	<i>Eubacterium dolichum</i> DSM 3991	YFYPKDNTPGCTKQACglskdsSHKRFKRYEymgvrfs
665	0	158433870	db	EDP12159.1	hypothetical protein EUBDOL_00253	<i>Eubacterium dolichum</i> DSM 3991	YFYPKDNTPGCTKQACglskdsSHKRFKRYEymgvrfs
666	0	58265152	ref	XP_569732.1	peroxidoredoxin	<i>Mannheimia haemolytica</i> PHL213	SLSQFAGKkVypkallpgctqacGISTDydgihrt
667	0	50259436	db	EAJL22109.1	peroxidoredoxin	<i>Mannheimia haemolytica</i> PHL213	SLSQFAGKkVypkallpgctqacGISTDydgihrt
668	0	48477514	ref	YP_023220.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
669	0	15893619	ref	NP_346968.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> B-3501A	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
670	0	120405074	ref	YP_954903.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> B-3501A	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
671	1.97E-10	194563761	ref	YP_002098784.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
672	0	32473880	db	EAY69265.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
673	0	32444416	emb	CAD744415.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
674	0	34540648	ref	NP_905127.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
675	0	34396962	db	AAQ66026.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
676	0	86608016	ref	YP_476778.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
677	0	8656558	db	ABD01515.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
678	0	88807182	ref	YP_01122894.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
679	0	88768396	db	EAR19551.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
680	0	78188188	ref	YP_378526.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
681	0	167582430	ref	YP_02375304.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
682	0	167620520	ref	YP_02389153.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
683	0	89069866	ref	YP_01157298.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
684	0	89044414	db	EAR05045.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
685	0	146304080	ref	YP_001191396.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
686	0	145702330	db	ABP95472.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
687	0	145219111	ref	YP_001129820.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
688	0	145205225	db	ABP36318.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
689	0	90581623	ref	YP_01237414.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
690	0	90437206	db	EA562406.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
691	0	207086699	db	EDZ63982.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
692	0	75675862	ref	YP_318283.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks
693	0	74420732	db	ABA04931.1	peroxidoredoxin	<i>Cryptococcus neoformans</i> var. <i>neoformans</i> JEC21	LPSIKLEljypkadijppctqacGLSKDaqkwwkaks

680	3.49E-14	119961376 ref	YP_949205.1	bacterioferritin comigratory protein (thioredoxin reductase)	Arthro bacter aureescens TC1	YFYKAAATPGCTTTEACgspvdVEGLVRSghvqalkeel
681	1.63E-15	119949235 db	ABM07146.1	bacterioferritin comigratory protein (thioredoxin reductase)	Arthro bacter aureescens TC1	YFYKNDNTSGCTLEAGlskdSHKKFIEKFIHymgtbvs
682	2.36E-11	160943861 ref	YP_02094164.1	hypothetical protein PEPMIC_00922	Peptostreptococcus micros ATCC 33270	YFYKNDNTSGCTLEAGlskdSHKKFIEKFIHymgtbvs
683	0	158447345 gb	EDP24340.1	hypothetical protein PEPMIC_00922	Peptostreptococcus micros ATCC 33270	YFYKNDNTSGCTLEAGlskdSHKKFIEKFIHymgtbvs
684	0	146299803 ref	YP_02379980.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia ubonensis Bu	YFYPAAFTKGCTTEAIGvsadPALDRAslspdkhven
685	0	146299803 ref	YP_02379980.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia ubonensis Bu	YFYKNDNTSGCTTEAIGvsadPALDRAslspdkhven
686	0	146152449 db	ABO003303.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Flavobacterium johnsoniae UW101	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
687	0	58584387 ref	YP_197060.1	peroxiredoxin	Wobaschia endosymbiont strain TRS of Brugia malayi	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
688	0	58118703 gb	AAW70718.1	peroxiredoxin	Wobaschia endosymbiont strain TRS of Brugia malayi	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
689	2.90E-11	170703026 ref	ZP_02893885.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia ambifera IOP40-10	YFYPAAFTKGCTTEAIGvsadPALDRAslspdkhven
690	0	170132067 db	EDT00566.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia ambifera IOP40-10	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
691	6.37E-15	163703579 db	ZP_02122408.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Methylobacterium nodulans ORS 2060	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
692	0	162430268 gb	EDO40883.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Methylobacterium nodulans ORS 2060	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
693	0	33860639 ref	NP_892200.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus subsp. pastoris str. CCMP1986	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
694	0	33633581 femb	CAE16538.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus subsp. pastoris str. CCMP1986	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
695	0	149181279 ref	ZP_01859777.1	bacterioferritin comigratory protein	Bacillus sp. SG-1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
696	0	148851004 gb	EDL65156.1	bacterioferritin comigratory protein	Bacillus sp. SG-1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
697	0	86153867 ref	ZP_01072070.1	bacterioferritin comigratory protein Bcp	Campylobacter jejuni subsp. jejuni HB93-13	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
698	0	121612655 ref	YP_999986.1	anti-oxidant AhpC/TSA family protein	Campylobacter jejuni subsp. jejuni 81-1176	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
699	0	157414588 ref	YP_001481824.1	anti-oxidant AhpC/TSA family protein	Campylobacter jejuni subsp. jejuni 81-1176	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
700	0	167004943 ref	ZP_02270701.1	antioxidant. AhpC/Tsa family protein	Campylobacter jejuni subsp. jejuni 81-176	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
701	0	85942828 gb	EAQ60040.1	bacterioferritin comigratory protein Bcp	Campylobacter jejuni subsp. jejuni 81-176	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
702	0	87250364 gb	EAQ73322.1	antioxidant. AhpC/Tsa family	Campylobacter jejuni subsp. jejuni 81-176	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
703	0	157388552 db	ABV51847.1	antioxidant. AhpC/Tsa family	Campylobacter jejuni subsp. jejuni 81-1116	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
704	2.90E-11	107028957 ref	YP_626052.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia cenocepacia AU1054	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
705	0	116889885 ref	YP_835506.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia cenocepacia H12424	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
706	0	170793224 ref	YP_001765171.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia cenocepacia AU1054	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
707	0	105899121 gb	ABF81079.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia cenocepacia MC0-3	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
708	0	116647974 gb	ACR08615.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia cenocepacia AU1054	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
709	0	169816466 gb	ACA91049.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Burkholderia cenocepacia H12424	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
710	1.90E-12	121708436 ref	XP_001271480.1	disrupter of telomere silencing protein Dots5, putative	Aspergillus clavatus NRRL 1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
711	4.35E-09	92114934 db	EAWU0054.1	disrupter of telomere silencing protein Dots5, putative	Aspergillus clavatus NRRL 1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
712	0	917698024 gb	ABE60163.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Chromohalobacter salexigenis DSM 3043	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
713	1.32E-13	274964845 ref	NP_765102.1	hypothetical protein SE1547	Chromohalobacter salexigenis DSM 3043	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
714	0	17318012 gb	AAO05146.1	AE016749_92 conserved hypothetical protein	Staphylococcus epidermidis ATCC 12228	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
715	1.36E-14	169174465 ref	NP_02863666.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Staphylococcus epidermidis ATCC 12228	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
716	0	16917372 gb	EDS563851.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Arthro bacter chlorophenolicus A6	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
717	2.57E-16	16272212 ref	NP_438423.1	thioredoxin-dependent thiol peroxidase	Arthro bacter chlorophenolicus A6	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
718	0	1168620 sp	P44411.1	BCP_HAEIN RecName: Full=Putative peroxiredoxin bcp; AINName: Full=Putative peroxiredoxin bcp	Haemophilus influenzae Rd KW20	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
719	1.72E-13	21587329 emb	CAP85369.1	bacterioferritin comigratory protein (bcp)	Haemophilus influenzae Rd KW20	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
720	2.25E-14	17229895 ref	NP_486543.1	bacterioferritin comigratory protein	Penicillium chrysogenum Wisconsin 54-1255	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
721	0	17131595 dbj	BA874202.1	bacterioferritin comigratory protein	Penicillium chrysogenum Wisconsin 54-1255	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
722	3.65E-14	159030070 emb	CA090390.1	unnamed protein product	Penicillium chrysogenum Wisconsin 54-1255	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
723	8.82E-12	194365287 ref	YP_002027897.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Microcystis aeruginosa PCC 7806	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
724	0	194348001 gb	ACF51214.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Stenotrophomonas maltophilia R551-3	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
725	0	118894620 ref	ZP_01551967.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Stenotrophomonas maltophilia R551-3	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
726	0	118440398 ref	EAU47025.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Methylophilates bacterium HTCC2181	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
727	0	167624247 ref	YP_001674541.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Methylophilates bacterium HTCC2181	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
728	0	94969842 ref	YP_591890.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Shewanella halifaxensis HAW-EB4	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
729	0	94551892 gb	ABF41816.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Shewanella halifaxensis HAW-EB4	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
730	0	91216361 ref	ZP_01295328.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Acidobacteria bacterium Ellin345	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
731	0	91184599 gb	EA571875.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Acidobacteria bacterium Ellin345	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
732	0	15805872 ref	NP_294570.1	bacterioferritin comigratory protein	Psychrotrolexus torquus ATCC 700795	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
733	0	6458565 gb	AAF10425.1	AE001939_2 bacterioferritin comigratory protein	Deinococcus radiodurans R1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
734	0	197626694 gb	EDY39263.1	redoxin domain-containing protein	Deinococcus radiodurans R1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
735	0	120403797 ref	YP_953626.1	redoxin domain-containing protein	Cyanobacterium sp. PCC 7001	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
736	0	119958615 gb	ABM13620.1	Redoxin domain protein	Mycobacterium vanbaalenii PYR-1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
737	0	212713871 ref	ZP_03321999.1	hypothetical protein BIFPSEUDO_00913	Mycobacterium vanbaalenii PYR-1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
738	0	212689946 gb	EE849474.1	hypothetical protein BIFPSEUDO_00913	Bifidobacterium pseudocalenulatum DSM 20438	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
739	2.39E-14	148653565 ref	YP_001280668.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Bifidobacterium pseudocalenulatum DSM 20438	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
740	0	148572649 gb	ABQ94708.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Psychrobacter sp. Prwf-1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
741	0	206802972 ref	EDJ39452.1	Peroxioredoxin	Leptospirillum sp. Group II '5-way CG'	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
742	0	119963026 ref	YP_948239.1	bacterioferritin comigratory protein (thioredoxin reductase)	Arthro bacter aureescens TC1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
743	0	119949885 gb	ABM08796.1	bacterioferritin comigratory protein (thioredoxin reductase)	Arthro bacter aureescens TC1	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
744	2.92E-11	146303144 ref	YP_001190460.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Metallosphaera sedula DSM 5348	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
745	0	145701394 gb	ABP94536.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ Mai allergen	Metallosphaera sedula DSM 5348	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
746	0	54310025 ref	YP_131045.1	thioredoxin-dependent thiol peroxidase	Photobacterium profundum SS9	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert
747	0	46914464 femb	CAG21243.1	Putative bacterioferritin comigratory protein	Photobacterium profundum SS9	YFYKDDTTPGCTLEAKgsrdGHASFKAKYSymgiert



713	0	4619.1185	ref	ZP_00120284.2	COG1225: Peroxiredoxin	Bifidobacterium longum DJ1010A	YFYPAAMTPGCTTEACGhlarlasknrvGVSKDhvgvirs
		189439420	ref	YP_001954501.1	Peroxiredoxin	Bifidobacterium longum DJ1010A	
		189427855	gb	ACD98003.1	Peroxiredoxin	Bifidobacterium longum DJ1010A	
714	2.93E-15	189184183	ref	YP_001937918.1	peroxiredoxin, AhpC/ TSA family protein	Orientia tsutsugamushi str. Ikeda	YFYPKDNTPGCTTIEAGyyskshQKFKDKLClkqkllaa
		189184167	ref	YP_001937952.1	peroxiredoxin, AhpC/ TSA family protein	Orientia tsutsugamushi str. Ikeda	
		189184810	ref	YP_001938595.1	peroxiredoxin, AhpC/ TSA family protein	Orientia tsutsugamushi str. Ikeda	
		189180904	dbj	BA640684.1	peroxiredoxin, AhpC/ TSA family protein	Orientia tsutsugamushi str. Ikeda	
		189180938	dbj	BA640674.1	peroxiredoxin, AhpC/ TSA family protein	Orientia tsutsugamushi str. Ikeda	
		189181581	dbj	BA641361.1	peroxiredoxin, AhpC/ TSA family protein	Orientia tsutsugamushi str. Ikeda	
715	2.80E-17	75910085	ref	YP_324381.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Anabaena variabilis ATCC 29413	LPAQNGSfyfypkddtbgctaeascGVSDGshqkfkaskyn
		75910085	gb	ABA230486.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Anabaena variabilis ATCC 29413	
716	0	75108545	sp	G551156.1	PRXQ_WHEAT ReName: Full=Peroxiredoxin Q, chloroplastic; AINA	Triticum aestivum	AFASAFAYypadeipgkckqecGISGSdshakafaky
		55633012	db	AAV66923.1	peroxiredoxin Q	Triticum aestivum	
717	0	16383382	ref	YP_001624187.1	thioredoxin peroxidase	Renibacterium salmoninarum ATCC 33209	YFYPAASITPGCTKEACgispdLALSKFTIEAEsvglirs
		162953258	gb	ABT727173.1	thioredoxin peroxidase	Renibacterium salmoninarum ATCC 33209	
718	0	212828335	ref	ZP_03489389.1	hypothetical protein EUBIFOR_01978	Eubacterium bifforme DSM 3989	YFYPKDNTAGCTKOACgysvskidSHKFKQERYGeesglvr
		218215609	gb	EEC68947.1	hypothetical protein EUBIFOR_01978	Eubacterium bifforme DSM 3989	
719	3.26E-11	171184575	ref	YP_001793494.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermoproteus neutrophilus V25A1a	YFFKAFITQGTRETVYgvmTLLRRFAERYKqglvr
		170933378	gb	AC839048.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermoproteus neutrophilus V25A1a	
720	3.30E-10	153893828	ref	ZP_02014435.1	alkyl hydroperoxide reductase/ Mal allergen	Opitulaeae bacterium TV2	FFYPKAFITGGCTAQSCyvaliyvTQRRFKENRhlad
		151980101	gb	EDN44047.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Opitulaeae bacterium TV2	
721	0	116778913	gb	ABK21053.1	unknown	Picea sitchensis	SVSYAPbvkvsSLSKFKGKPyfypadespgckkeac
		215264425	gb	AC164204.1	bacterioferritin comigratory protein	Synechococcus sp. JA-3-3Ab	YFYPRDNTPGCTREACgysadSHQKFAQKLQynglht
722	0	66060785	ref	YP_475548.1	bacterioferritin comigratory protein	Synechococcus sp. JA-3-3Ab	FCGKILSslskfgyypAYFPADETPGCTKOACGaisgd
723	0	215264425	gb	AC164204.1	bacterioferritin comigratory protein	Salicornia herbacea	YFFPKADITPGCTTEACgysvsmDQKRFARKYHflgnara
724	1.06E-11	206601927	gb	EDJ28409.1	putative peroxiredoxin	Leptosiphium sp. Group II '5-way CG'	YFYPKDDITPGCTKEACgysvsmDHOAFITSKYAesgklq
725	0	37521944	ref	NP_925321.1	bacterioferritin comigratory protein	Gloeobacter violaceus PCC 7421	
		35212943	dbj	BAC690316.1	glr2375	Gloeobacter violaceus PCC 7421	
726	0	116779547	gb	ABK21333.1	unknown	Picea sitchensis	PPVKLVSVfypadeipgckkeacGISGSoslnakafaky
727	9.45E-16	24216141	ref	NP_713622.1	bacterioferritin comigratory protein	Leptospira interrogans serovar Lai str. 56601	YFYPKDQITPGCTTEACgysvskidSHQKFKIEKQEEadgkllk
		45656628	ref	YP_000714.1	bacterioferritin comigratory protein	Leptospira interrogans serovar Copenhageni str. Fluoruz L1-130	
		45699633	gb	AA506840.1	AE011502_4 Bacterioferritin comigratory protein	Leptospira interrogans serovar Lai str. 56601	
728	2.06E-11	45999633	gb	AA506840.1	bacterioferritin comigratory protein	Leptospira interrogans serovar Copenhageni str. Fluoruz L1-130	YFYPKDDITPGCTTEAlgyvskidHKFRDKHPEpdgvlrq
		63853309	gb	EA091161.1	bacterioferritin comigratory protein	Oceanicola alexandrii HTC2633	
729	2.65E-11	186682733	ref	YP_001866929.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nectoc punctiforme PCC 73102	LGGKLPAlfyfypkdfitsgclaeacGVSA DSshaktoesag
		186465185	gb	ACC80986.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nectoc punctiforme PCC 73102	
730	3.07E-11	78066634	ref	YP_369403.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia sp. 383	SLSIDLKGKLLfyfypmfsgeclklacGISDPpklrfrk
		170704290	ref	ZP_02894835.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia sp. 383	
		77967379	gb	ABB08759.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ambifaria IOP40-10	
731	6.32E-12	170130801	gb	EDS99583.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ambifaria IOP40-10	YFYPKDNTPGCTTEAMgysvrdSHDKFKQNLVxgjlrs
		124266731	ref	YP_001020735.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ambifaria IOP40-10	
733	3.26E-12	39972403	ref	XP_367592.1	putative bacterioferritin comigratory oxidoreductase protein	Methylobium petroleiphilium PM1	KPAKSKStfypkalkipgckkqacGLSADaekkeakeeke
		142529506	gb	ABM94900.1	putative bacterioferritin comigratory oxidoreductase protein	Methylobium petroleiphilium PM1	
		145016698	gb	EDK01128.1	hypothetical protein MSG_07503	Magnaporthe grisea 70-15	PLUMLKDQNGfyfypkddipgclmeacGVSGDLaalrk
734	2.00E-13	87320292	ref	ZP_01085117.1	putative bacterioferritin comigratory protein	Synechococcus sp. WH 5701	
		8728321	gb	EA076173.1	putative bacterioferritin comigratory protein	Synechococcus sp. WH 5701	VLSTFKKLLfyfypmfsgeclklacGISDPpklrfrk
735	2.13E-13	206874376	ref	ZP_03235293.1	peroxiredoxin Q	Bacillus cereus H5081_97	
		206747616	gb	EDJ290006.1	peroxiredoxin Q	Bacillus cereus H5081_97	
736	1.08E-11	113476304	ref	YP_722365.1	redoxin	Trichodesmium erythraeum IMS101	YFYPKDFTSGCTTEARgvsadSHQEFCDSEGnpggllq
		110167352	gb	ABG51892.1	redoxin	Trichodesmium erythraeum IMS101	
738	1.91E-14	117924770	ref	YP_865387.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Magnatococcus sp. MC-1	YFYPKDNTPGCTTEAGglskshHTNFIKSDYDmgjlrs
		117608526	gb	ABK43981.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Magnatococcus sp. MC-1	
739	0	170718060	ref	YP_001785098.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Haemophilus sordii 2336	YFYPKALITPGCTKOACgispklANFLIEKKAfdglrfr
		168826189	gb	ACA31560.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Haemophilus sordii 2336	
740	0	182951425	gb	ZP_03495958.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermus aquaticus Y51MC23	YFYPKDDITPGCTKEACgysvsmSHKRFRAEKELygdhri
		218244325	gb	EED10850.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermus aquaticus Y51MC23	
741	0	12707621	ref	ZP_03315749.1	hypothetical protein PROV/RUST_02566	Providencia rustigianii DSM 4541	YFYPKAMITPGCTVQACglsrdKLARFAEKELygdhri
		12677882	gb	EEB38479.1	hypothetical protein PROV/RUST_02566	Providencia rustigianii DSM 4541	
742	0	89074982	ref	ZP_01161742.1	bacterioferritin comigratory protein	Photobacterium sp. SKA34	SLSIDFKGKLYfypkamitpgclvtqad.GISIDAgwgl
		89049221	gb	EAR54785.1	bacterioferritin comigratory protein	Photobacterium sp. SKA34	
743	6.95E-12	86609632	ref	YP_478394.1	putative peroxiredoxin	Synechococcus sp. JA-2-3B aJ(2-13)	YFYPRDFTSGCTTEARgvsadSHRRFCSAEGpegjlre
		86658174	gb	ABD003131.1	putative peroxiredoxin	Synechococcus sp. JA-2-3B aJ(2-13)	
745	0	160894320	ref	ZP_02075097.1	hypothetical protein CLO1250_01873	Clostridium sp. L2-50	YFYPKDNTPGCTKOACgysvskidSHKRFEEKYGeegllk
		156864021	gb	EDO57452.1	hypothetical protein CLO1250_01873	Clostridium sp. L2-50	
746	0	11846704	ref	YP_880887.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Mycobacterium avium 104	YFYPAASITPGCTKOACgispklAKLFRDAEKYvgvirs
		118168328	gb	ABK69225.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Mycobacterium avium 104	
747	2.37E-12	71908682	ref	YP_284449.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Dechloromonas aromatica RCB	YFYPKDSTPGCTTQGGglsrdSHENFKAKQEVgjlrs
		71846483	gb	AAZ45979.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Dechloromonas aromatica RCB	
748	6.27E-11	110634138	ref	YP_674346.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Mesorhizobium sp. BNC1	YFYPKDDITSGCTAAAlgspsdSHDKFKAKHDLdaegri
		110285122	gb	ABG63181.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Mesorhizobium sp. BNC1	

749	4.03E-10	120554612 ref	YP_958993.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Marinobacter aquaeolei VT8	YFYPKDNTPGCTTGGGQyvsrdkKLLKLYGKEHkegvir
750	4.00E-12	85716322 ref	ABM18776.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Marinobacter aquaeolei VT8	FFYPRAGTTPGCTREAlIakafaaagktGV/SADagIari
752	7.44E-16	150004915 ref	YP_001299699.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nitrobacter sp. Nb-311A	YFYPKDMITSGCTAAQACgyspdIAcyaefraGVSNshqkIekne
753	0	117928889 ref	YP_873440.1	putative bacterioferritin co-migratory protein	Bacteroides vulgatus ATCC 8482	YFYPAAMTTPGCTTEACgjspspdKLAkERDAYHvmgvis
754	4.39E-13	147920236 ref	YP_685997.1	redoxin domain protein	Bacteroides vulgatus ATCC 8482	VFYPADSPVCYVDELAgisvdsHQAFKAKSRNgdIjrw
755	3.19E-11	73541684 ref	CAJ38671.1	putative 1-cysteine peroxidoxin	Acidothermus cellulolyticus 11B	PVTDGdVykdnptgctteamVFGISRDShenIakle
756	0	196242352 ref	AA261360.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ralstonia eutropha JMP134	YFYPRDNTPGCTKEACgyspdAHQKFAQKYDlqIwq
757	1.30E-10	196213569 ref	EDV08234.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanosche sp. PCC 7425	YFYPKDNTPGCTTQGGQyvsrdTHEINFKAKQSYgyvirs
758	6.30E-14	153894515 ref	YP_02015099.1	AhpC/Tsa family protein	Pseudomonas syringae pv. phaseolicola 1448A	APAIALSYfypradlpgctteacGISDdIeplfaeyd
759	0	127512774 ref	YP_001093971.1	Redoxin domain protein	Halonubrum lacusprofundi ATCC 49239	YFYPRASITPGCTVQACnwiigITLLADqIkfmgrren
760	6.52E-10	186475686 ref	YP_001857156.1	Redoxin domain protein	Shewanella loihica PV-4	LRGKKVYyypkdnptgctlegIVSRDhkkmygkvev
761	9.95E-12	163852401 ref	YP_001640444.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia phymatum STM815	LPGAGGEfyypkldisgctleaqGVSPDshakIraakvg
762	2.19E-14	148657657 ref	YP_001277862.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylobacterium extorquens PA1	YFYPKDDTSGCTTQACgyspdSHQKFKTKHnyvgiers
763	1.00E-14	108763500 ref	YP_634658.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseiflexus sp. RS-1	YFYPKDDSPGCTTAQACgjspsdSHEGFAAKHRRsqjrd
764	0	86130304 ref	YP_01048904.1	anti-oxidant AhpC/Tsa family protein	Myxococcus xanthus DK 1622	SLSDFKGKGLfyypkeasipgctaeacGVSAVDyghirm
765	0	197774450 ref	YP_002197356.1	bacterioferritin migratory protein, thiol peroxidase, putative	Cellulophaga sp. MED134	YFYPAALTPGCTKQACgyspdKLAkFREKEDygvirs
766	8.54E-13	159795627 pdb	ZYWN	bacterioferritin migratory protein	Dokdonia donghaensis MED134	AFYPAAFVQVCTKEMCGisvdsNKAKFEHNIkgvyla
767	0	126647839 ref	EA282603.1	bacterioferritin migratory protein	Streptomyces pristinaespiralis ATCC 25486	LLFSLDSIskfkdkqIYFYPKDFTPGCTKEACgjskd
768	0	156078746 ref	NP_216124.1	hypothetical alkyl hydroperoxide reductase	Algoriphagus sp. PR1	FFYPAAMTTPGCTKEACgjsktdKQAKFAKVRIRtrirs
769	3.98E-13	119476725 ref	YP_01617035.1	bacterioferritin migratory protein	Mycobacterium tuberculosis H37Rv	SLKDFKGGQgyfyrastpgctIqIhVvVKIKKplisd
770	1.15E-13	71063529 ref	YP_264056.1	Probable peroxidoxin bcpB	Mycobacterium bovis AF2122/97	YFYPKDNTPGCTTQATlgvrsdSHESF1IKYNIgIvrs
771	0	87118945 ref	YP_01074843.1	Probable peroxidoxin bcpB	Mycobacterium bovis BCG str. Pasteur 1173P2	YFYPKDSTPGCTAQACgjsktdRIHQNF1KKNKeeegksd
772	1.96E-11	217977782 ref	YP_002361929.1	Probable peroxidoxin bcpB	Mycobacterium bovis BCG str. Pasteur 1173P2	YFYPKDDTSGCTKEAlgvspsdSHVVKFKTKHQIldiq
773	0	149365075 ref	YP_01887110.1	Probable peroxidoxin bcpB	Mycobacterium tuberculosis H37Rv	YFYPKAMTTPGCTVQACgjsktdKLSRFAEKELyngIhri
774	0	115943720 emb	CAL21666.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylocella silvestris BL2	
775	0	149291488 gb	EDM41562.1	thioredoxin-dependent thiol peroxidase	Yersinia pestis CO92	
776	0	149291488 gb	EDM41562.1	bacterioferritin migratory protein	Yersinia pestis CO92	

774	1.16E-11	21225627	ref NP_631406.1	hypothetical protein SC07353	Streptomyces coelicolor A3(2)	FFYPAAALTTGGTAAEACgvsqdRQGEAFGRRTalaaira
775	4.05E-13	8052366	emb CAB92136.1	conserved hypothetical protein SGNH11_07	Streptomyces coelicolor A3(2)	FFYPKDNTPGCTTEAMlgisrdsIHENFKAKLEvgiers
776	5.71E-12	17548036	ref NP_519438.1	bacterioferritin comigratory xtdoreductase protein	Ralstonia solanacearum GMI1000	FFYPRDNTSGCTTEALgvsdkSHKFKDKHSmgvirs
777	0	17428331	emb CAD15019.1	probable bacterioferritin comigratory xtdoreductase protein	Ralstonia solanacearum	FFYKPMITPGCTVQACgjsidKLSRFAEKELyghjri
		218781431	gb ACL03887.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Desulfatibacillum alkenivorans AK-01	
		108811484	ref YP_647251.1	thioredoxin-dependent thiol peroxidase	Yersinia pestis Antiqua	
		145899443	ref YP_001163519.1	thioredoxin-dependent thiol peroxidase	Yersinia pestis Nepal516	
		153948624	ref YP_001400225.1	thioredoxin-dependent thiol peroxidase	Yersinia pestis Pestoides F	
		162418156	ref YP_001607492.1	thioredoxin-dependent thiol peroxidase	Yersinia pestis Angola	
		166011176	ref ZP_02232074.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Antiqua str. E1979001	
		166212368	ref ZP_02238403.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Antiqua str. B42003004	
		167398016	ref ZP_02304540.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Antiqua str. UG05-0454	
		167424696	ref ZP_02316449.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Mediaevalis str. K1973002	
		108771532	gb ABG17651.1	bacterioferritin comigratory protein	Yersinia pestis Nepal516	
		108780162	gb ABG14220.1	bacterioferritin comigratory protein	Yersinia pestis Antiqua	
		145211139	gb ABP40546.1	bacterioferritin comigratory protein	Yersinia pestis Pestoides F	
		152960119	gb ABS47580.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pseudotuberculosis IP 31758	
		162350971	gb ABX84919.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis Angola	
		165889854	gb EDI442155.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Antiqua str. E1979001	
		166206299	gb EDI50779.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Antiqua str. B42003004	
		167051520	gb EDI62928.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Antiqua str. UG05-0454	
		167056578	gb EDI66347.1	peroxiredoxin, bacterioferritin comigratory protein	Yersinia pestis biovar Mediaevalis str. K1973002	
778	7.15E-16	91978920	ref YP_569579.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodospseudomonas palustris B18b5	KQSRDKSPKSFyp rampgckeatGVSADefgiers
		91683376	gb ABE39678.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodospseudomonas palustris B18b5	
779	9.67E-11	1047839048	ref YP_6095446.1	hypothetical protein PSEEN4067	Pseudomonas entomophila L48	LAGLKGQyfpkdstipctteggGVSRSRshenthakoa
		95112035	emb CAK116762.1	conserved hypothetical protein, putative bacterioferritin comigratory protein	Pseudomonas entomophila L48	
780	5.41E-14	149185107	ref ZP_01863424.1	putative bacterioferritin comigratory protein	Erythrobacter sp. SD-21	FFYPKDNTPGCTTEAKgvsdkKHQNFIAKHDMymgiers
		148831218	gb EDI_49652.1	putative bacterioferritin comigratory protein	Erythrobacter sp. SD-21	
781	2.50E-18	15380777	ref ZP_01960445.1	hypothetical protein BACCAC_02080	Bacteroides caecae ATCC 43185	VLGINEKfyypkdstipctteggGVSVDnqtkfieknn
		149129386	gb EDI020600.1	hypothetical protein BACCAC_02080	Bacteroides caecae ATCC 43185	
782	5.52E-13	67159217	ref ZP_00419893.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Azobacter vinelandii AVOP	FFYPKDSITPGCTTEGQgvsrdSHENFKSKOAYgldrs
		67084246	gb EAM03734.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Azobacter vinelandii AVOP	
783	4.39E-14	20092861	ref NP_618936.1	bacterioferritin comigratory protein Bcp	Methanosarcina acetivorans C2A	FFYPRDNTPGCSLEAKgvsrdSHRKFIEKKEpajlik
		19818166	gb AAM07416.1	bacterioferritin comigratory protein Bcp	Methanosarcina acetivorans C2A	
784	3.45E-10	91772196	ref YP_564948.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methanococcus burtoni DSM 6242	LKGKVVyfpvrdntsgcsteamGVSKDshkfkfiekke
		91711171	gb ABE51098.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methanococcus burtoni DSM 6242	
785	0	186681017	ref YP_001864213.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nostoc punctiforme PCC 73102	FFYPKDDITPGCTKQACgvsadSHQAFATQKYNpngkith
		186463469	gb ACCT9270.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nostoc punctiforme PCC 73102	
786	0	118581405	ref YP_902855.1	redoxin domain-containing protein	Pelobacter propionicus DSM 2379	FFYPKDNTPGCTKEACgvsdkSHNKFSIFAfGvgjliis
		118504115	gb ABL00598.1	redoxin domain-containing protein	Pelobacter propionicus DSM 2379	
787	6.06E-13	20172327	ref YP_002253671.1	bacterioferritin comigratory protein	Ralstonia solanacearum Meik2	FFYPKDNTPGCTTEAMlgisrdsIHENFKAKLEvgiers
		206688470	emb CA_Q35433.1	bacterioferritin comigratory protein	Ralstonia solanacearum	
788	1.18E-11	153005637	ref YP_001379962.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Anaeromyxobacter sp. Fw109-5	LLGSAALnlskklkqpfAYPKAFITPGCTKQNAglsid
		152029210	gb ABS26978.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Anaeromyxobacter sp. Fw109-5	
789	6.77E-15	186688487	ref YP_001869683.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nostoc punctiforme PCC 73102	FFYPKDDITPGCTTEAKlgaklqgSHCKFISKHNlsipd
		186468939	gb ACC84740.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nostoc punctiforme PCC 73102	
790	1.13E-13	120609922	ref YP_969600.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Acidovorax avenae subsp. citrulli AA C00-1	FFYPKDNTPGCTTEAMlgvsrdSHDDFKELVkgjlers
		120588386	gb ABM31826.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Acidovorax avenae subsp. citrulli AA C00-1	
791	0	55981289	ref YP_144566.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Thermus thermophilus HB8	FFYPKDDITPGCTKEACgvsadSHKRFARFYGvegvlrq
		55772682	dbi BAD71123.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Thermus thermophilus HB8	
792	0	145300280	ref YP_001143121.1	bacterioferritin comigratory protein	Aeromonas salmonicida subsp. salmonicida A449	FFYPKAMITPGCTTQACgjspdHLKKFEERDSydgjhlrl
		142859362	gb ABO91373.1	bacterioferritin comigratory protein	Aeromonas salmonicida subsp. salmonicida A449	
793	2.52E-11	134295219	ref YP_001118954.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia vietnamiensis G4	FFYPAAFTKGCTIEATgvsadLPALDRAslspdkthven
		134138376	gb AB054119.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia vietnamiensis G4	
794	4.00E-17	50843124	ref YP_056351.1	putative peroxiredoxin (AhpC/TSA family protein)	Protonibacterium aenes KPA171202	FFYPAAMITPGCTTQAIgispkLQKFKFAKESivgwirs
		50840726	gb AA183393.1	putative peroxiredoxin (AhpC/TSA family protein)	Protonibacterium aenes KPA171202	
795	2.42E-15	72382144	ref YP_291499.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. NATL2A	LFASINSSldfkskwwYFPKDFSSGCTLEAKglsad
		72001994	gb AA257796.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. NATL2A	
796	0	126174797	ref YP_001050916.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mal allergen	Shewanella baltica OS155	FFYPKAAITPGCTVQACgjspskLAKFAEKQAYdgjhlrl
		12599792	gb ABN62047.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mal allergen	Shewanella baltica OS155	
797	1.67E-13	83943208	ref ZP_00955660.1	AhpC/TSA family protein	Sulfitobacter sp. EE-36	FFYPRDDITPGCTKEAVgvsrdKHDRFAAKHAsmgiera
		83842008	gb EAP84085.1	AhpC/TSA family protein	Sulfitobacter sp. EE-36	
798	3.73E-13	119501340	ref XP_001267427.1	disrupter of telomere silencing protein Dot5, putative	Neosartorya fischeri NRRL 181	EKSKRfltyprlasipgctkqacGLSADarissfkakqjs
		119415592	gb EAW25530.1	disrupter of telomere silencing protein Dot5, putative	Neosartorya fischeri NRRL 181	
799	1.88E-10	2218093	gb AAB71130.1	bacterioferritin comigratory protein homolog	Riftia pachytilia endosymbiont	FFYPKDDITPGCTIEAVgvsrdSHAAFRDKHGRmgvirs
800	0	156932966	ref YP_001436882.1	thioredoxin-dependent thiol peroxidase	Enterobacter sakazakii ATCC BAA-894	FFYKPMITPGCTVQACgjsidKLSRFAEKELyghjri
		156631220	gb ABLU76046.1	thioredoxin-dependent thiol peroxidase	Enterobacter sakazakii ATCC BAA-894	
802	2.01E-12	119492805	ref ZP_01623891.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Lynghya sp. PCC 8106	FFYPKDFITSGCTLEARglsadSHAEFCDSSEGpaitsee
		119452958	gb EAW34130.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Lynghya sp. PCC 8106	

803	0	163755315	ref	ZP_02162435.1	bacterioferritin comigratory protein	Kordia algicola OT-1	SLSDYAGKGLfypkasipgctaecGVSDAdgihrk
		161324735	gb	EDP96064.1	bacterioferritin comigratory protein	Kordia algicola OT-1	
804	0	38234413	ref	NP_940180.1	bacterioferritin comigratory protein	Corynebacterium diphtheriae NC.TC.13129	YFYPFRANTPGCTKEAGcgsprKLAARDDYDvqgviys
		38200676	emb	CAE50372.1	bacterioferritin comigratory protein	Corynebacterium diphtheriae	
805	5.79E-15	78212672	ref	YP_381451.1	putative bacterioferritin comigratory protein	Synechococcus sp. CC9605	FFYPKDDTTPGCTAEACgigsdSHRRFAATRHNgvyrh
		78197131	gb	ABBS34836.1	putative bacterioferritin comigratory protein	Synechococcus sp. CC9605	
806	2.44E-14	118498311	ref	YP_899361.1	bacterioferritin comigratory protein	Francisella tularensis subsp. novicida U112	LLSDFGKKKnyfypkamtpgctqtsIGISPdYdgihr
		194323895	ref	ZP_03067670.1	antioxidant. AhpC/TSA family protein	Francisella tularensis subsp. novicida U112	
		11842427	gb	ABK90607.1	bacterioferritin comigratory protein	Francisella tularensis subsp. novicida U112	
		194323895	ref	EDJ119275.1	antioxidant. AhpC/TSA family protein	Francisella tularensis subsp. novicida U112	
807	0	117617543	ref	YP_855437.1	putative peroxiredoxin bcp	Aeromonas hydrophila subsp. hydrophila ATCC 7966	YFYPKAMTPTGCTTQACgispdrLKKFEEERDnydqihrl
		117558950	gb	ABK33898.1	putative peroxiredoxin bcp	Aeromonas hydrophila subsp. hydrophila ATCC 7966	
808	0	78213815	ref	YP_382594.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. CC9605	SLASLRGfypkdtidgkckcaecGISKDShtnkfkhe
		78198224	gb	ABBS36039.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. CC9605	
809	0	88855893	ref	ZP_01150256.1	BCp	marine actinobacterium PHSC20C1	YFYPAAITPGCTTQACgystdrKLTkFREQRvwyviys
		88814917	gb	EAR24776.1	Bcp	marine actinobacterium PHSC20C1	
810	4.24E-13	191164510	ref	ZP_03026374.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Geobacter sp. M21	FFYPDRDNTPGCTAEAVkqiqlfcdqTIGSIRSRvpsd
		190994401	gb	EDV69865.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Geobacter sp. M21	
811	4.16E-16	162660664	ref	ZP_01731765.1	antioxidant. AhpC/Tsa family protein	Cyanoshece sp. CCY0110	YFYPKDDTTPGCTKEAGvysmdSHKFAEKKEYGaegltusy
		126618037	gb	EAZ88825.1	antioxidant. AhpC/Tsa family protein	Cyanoshece sp. CCY0110	
812	1.20E-12	159040770	ref	YP_001540022.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Caldyvirga maquiltingensis IC-167	FLGKGRPflpaaflspsvctkcaicAI/SDalkafkcaek
		157919605	gb	ABW01032.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Caldyvirga maquiltingensis IC-167	
813	2.54E-09	118049611	ref	ZP_01518162.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Comamonas testosteroni KF-1	LLAALLAYfipkafatggctleahTLKRFSITEACivssd
		118003478	gb	EAUV17631.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Comamonas testosteroni KF-1	
814	0	120899129	ref	YP_963703.1	thioredoxin-dependent thiol peroxidase	Shewanella sp. W3-18-1	YFYPKASITPGCTVQACgispdrKLAkFAEKQSYdgihr
		146292800	ref	YP_001183224.1	thioredoxin-dependent thiol peroxidase	Shewanella putrefaciens CN-32	
		120859222	gb	ABM25149.1	Redoxin domain protein	Shewanella sp. W3-18-1	
		145664490	gb	ABP75425.1	Redoxin domain protein	Shewanella putrefaciens CN-32	
816	0	209890907	ref	ZP_03283554.1	hypothetical protein ENTCAN_03360	Enterobacter cancerogenus ATCC 35316	YFYPKAMTPTGCTVQACgistsdKLSRFAEKELydgihri
		20989772	gb	EEA13421.1	hypothetical protein ENTCAN_03360	Enterobacter cancerogenus ATCC 35316	
817	1.86E-09	150396688	ref	YP_001327155.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Sinorhizobium medicae WSM419	FFYPKDDTKGCTQOEAlgispdSHDRFTKRHGhldirq
		150028203	gb	ABR60320.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Sinorhizobium medicae WSM419	
818	3.66E-12	162454455	ref	YP_001618822.1	antioxidant protein	Sorangium cellulosum 'So ce 56'	YFFPKAFTPSCVTEAQAqvstQQRFAEAQKilglarr
		161165037	emb	CAN96342.1	antioxidant protein	Sorangium cellulosum 'So ce 56'	
819	1.69E-18	160887384	ref	ZP_02068387.1	hypothetical protein BACOVA_05403	Bacteroides ovatus ATCC 8483	APEILGfypjksispsctagaacGVSDsthpklfcknn
		156107795	gb	EDD09640.1	hypothetical protein BACOVA_05403	Bacteroides ovatus ATCC 8483	
820	0	169179437	ref	ZP_02840447.1	redoxin domain protein	Arthrobacter chlorophenolicus A6	LVTGDSpsgsmYFYPAAA TP GC TKEACkhtkfaaag
		169013027	gb	EDS59695.1	redoxin domain protein	Arthrobacter chlorophenolicus A6	
821	8.30E-11	214026694	ref	EEB69529.1	redoxin	Ruegeria sp. R11	FFYPRDDTTPGCTKESihlgafadagaGISKDhwglers
		53718899	gb	YFYP_107885.1	AhpC/TSA family protein	Burkholderia pseudomallei K96243	YFYPAAFTTGCTIEATHvysadKLPAlSikANRwaashrq
822	3.83E-11	76611807	ref	YP_332901.1	AhpC/TSA family protein	Burkholderia pseudomallei 1710b	
		126442138	ref	YP_001058401.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 668	
		126453167	ref	YP_001065637.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1106a	
		13428386	ref	YP_01770558.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 305	
		161358012	ref	YP_02101890.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1106b	
		161372512	ref	ZP_02112073.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1710a	
		167718916	ref	ZP_02402152.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei DM98	
		167737920	ref	ZP_02410694.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 14	
		167815101	ref	ZP_02446781.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 91	
		167823518	ref	ZP_02454989.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 9	
		167845067	ref	ZP_02470575.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei B7210	
		167893611	ref	ZP_02481013.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 7894	
		167902056	ref	ZP_02489261.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1106b	
		167910294	ref	ZP_02497385.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 112	
		167916325	ref	ZP_02505416.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei BCC215	
		194506822	ref	YP_002036396.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1655	
		194509791	ref	YP_002022321.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei Pasteur 52237	
		194514438	ref	YP_002049949.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei S13	
		194571684	ref	YP_002106684.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 406e	
		217423735	ref	YP_02455236.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 576	
		52209313	emb	CAH35258.1	AhpC/TSA family membrane protein	Burkholderia pseudomallei K96243	
		76581260	gb	ABA50735.1	AhpC/TSA family membrane protein	Burkholderia pseudomallei 1710b	
		126221631	gb	ABN85137.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 668	
		126226809	gb	ABN90349.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1106a	
		157806846	gb	EDD084016.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 406e	
		134244849	gb	EBA44946.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 305	
		157935944	gb	EDD091614.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei Pasteur 52237	
		169654046	gb	EDS38739.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei S13	
		184210847	gb	EDJ07890.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1655	
		217393593	gb	EEC33614.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 576	
823	3.27E-16	16329296	ref	NP_440024.1	bacterioferritin comigratory protein	Synechocystis sp. PCC 6803	YFYPKDNTPGCTTEAlyvpsdSHGKFDKHncseglirs

824	0	1651777 dbj	BAA116704.1	bacterioferritin comigratory protein	Synechocystis sp. PCC 6803	YFYPKASTPGCTTEAGVsvrdAIDTFADKQGVmgjleira
		1621419136 ref	YP_001603657.1	putative hydroxylase bcp	Glucanacetobacter diazotrophicus PAI 5	
		2095443033 ref	YP_002272782.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Glucanacetobacter diazotrophicus PAI 5	
		161787773 emb	CAP57369.1	putative peroxiredoxin bcp	Glucanacetobacter diazotrophicus PAI 5	
825	2.49E-14	209532740 gb	ACI52677.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rickettsia felis URRWXCal2	YFYPKDDTTPGCTTEAAGVsvkdSHDKFEKYSymgdira
826	2.57E-11	67458590 ref	YP_246214.1	bacterioferritin comigratory protein	Burkholderia oklahomensis E0147	SLSGLKGGKLYfypkdnipgctteglGVSVRDRvrgiers
826	16.7562493 ref	67004123 gb	AAV61049.1	bacterioferritin comigratory protein	Burkholderia oklahomensis C8786	
827	6.73E-13	162931818 ref	NP_440046.1	antioxidant. AhpC/TSA family protein	Synechocystis sp. PCC 6803	YFYPKDDTTPGCTTEAAGVsvdSHFAFCDAECPegeline
828	3.16E-14	1153678916 gb	EAUJ67862.1	bacterioferritin comigratory protein	Synechocystis sp. PCC 6803	YFYPKDDTTPGCTTEAAGVsvdSHFAFCDAECPegeline
828	11.53668916 gb	1153668916 gb	EAUJ67862.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Stigmatella aurantiaca DW4/3-1	YFYPKDDTTPGCTTEAAGVsvdSHFAFCDAECPegeline
829	3.79E-10	15643543 ref	NP_228569.1	hypothetical protein TM0780	Thermotoga maritima MSB8	AFYPGAFTSVCKEKLGVsvdANKFAEKNNHpgytaa
		1482689293 ref	YP_001243763.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermotoga petrophila RKU-1	
		170287952 ref	YP_001738190.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermotoga sp. RQ2	
		4981309 gb	AAD35692.1	AE001747_5 bacterioferritin comigratory protein. ahpC/TSA family	Thermotoga maritima MSB8	
		147734837 gb	ABQ46177.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermotoga petrophila RKU-1	
		170175455 gb	AC808507.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermotoga sp. RQ2	
		214041010 gb	EEB81657.1	bacterioferritin comigratory protein. AhpC/TSA family	Marinitoga piezophila KA3	
830	1.60E-13	33862660 ref	NP_894220.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9313	LKGGKVLVfypkddttdgdaeaGVSDShrtqfaerhg
		33634576 emb	CAE20562.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9313	
831	1.67E-13	72382626 ref	YP_291981.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. NATL2A	FFYPKDDTTPGCTTEAENGVsvdSHRSFADKNKvigeirn
		124026345 ref	YP_001015461.1	peroxiredoxin	Prochlorococcus marinus str. NATL1A	
		72002476 gb	AA258278.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. NATL2A	
		123861413 gb	ABM76196.1	peroxiredoxin	Prochlorococcus marinus str. NATL1A	
832	2.05E-11	116074817 ref	YP_01472078.1	alkyl hydroperoxide reductase/thiol specific antioxidant/Mal allergens	Synechococcus sp. RS9916	LEGTRRTVfypdrflfsgleahGVSDArlkqlgseas
833	2.77E-11	116068039 gb	EAUJ73792.1	alkyl hydroperoxide reductase/thiol specific antioxidant/Mal allergens	Synechococcus sp. RS9916	YFYPAAFTKGTCTEATQVsvdLPAALDRASlspdkthven
		116689212 ref	YP_834835.1	redoxin	Burkholderia cenocepacia H12424	
		105892456 gb	ABF75621.1	Redoxin	Burkholderia cenocepacia AU_1054	
		116647301 gb	ABK07942.1	Redoxin domain protein	Burkholderia cenocepacia H12424	
834	0	21325260 gb	BAB98982.1	Peroxiredoxin	Burkholderia cenocepacia ATCC_13032	SLSDFAGKQVfypkamtgpcckeaGVSDVgvvirs
835	0	111220976 ref	YP_711770.1	putative thiol peroxidase. thioredoxin-dependent. Bacterioferritin comi	Frankia alni ACN14a	YFYPAASTPGCTKQAGVsvdPKLKFVFRDNEsvvirs
836	3.26E-10	482678040 ref	YP_001832186.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Beijerinckia indica subsp. indica ATCC 9039	VVALAAVfypaafisgctveahGVSHDalkawakasp
		168339923 gb	AC894697.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Beijerinckia indica subsp. indica ATCC 9039	
837	9.14E-13	158330879 ref	YP_001517263.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant, putative	Acyrochloris marina MBIC11017	VLGLVSVfypdrtfpgctveaQDLPKYIERNfgyvsd
		158306320 gb	ABWV27937.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant, putative	Acyrochloris marina MBIC11017	
838	1.18E-10	146277889 gb	YP_001168048.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodobacter sphaeroides ATCC 17025	SLSALFKPGTAYfypkddttdgdaeaGVSDglskgjgilia
		145565130 gb	ABP70743.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodobacter sphaeroides ATCC_17025	
839	4.64E-11	156734533 ref	YP_001433582.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseiflexus castenholzii DSM 13941	FFYPKADTPTCTTEACsvyaeriaGVSDPaqaafndkhh
		156724748 gb	ABU05986.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseiflexus castenholzii DSM 13941	
840	1.08E-13	150020632 ref	YP_001305986.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thermosiphon melanesiensis B1429	YFYPKDNITKGTCTTEAVGVsvdSHKFKFAKHNYvgivrt
		123441477 ref	YP_001005463.1	thioredoxin-dependent thiol peroxidase	Yersinia enterocolitica subsp. enterocolitica 8081	YFYPKAMTPGCTVQACgjsrdKLSRFAEKELydgihri
841	0	122088438 emb	CAL11230.1	bacterioferritin comigratory protein	Yersinia enterocolitica subsp. enterocolitica 8081	
842	3.34E-13	154491114 ref	YP_02031055.1	hypothetical protein PARMER_01036	Parabacteroides merdae ATCC 43184	FKGKKLAvfypkdnrtsgctaeacGVSKDshrtgflqce
		154088534 gb	EDN87578.1	hypothetical protein PARMER_01036	Parabacteroides merdae ATCC 43184	
843	0	213965665 ref	YP_03394056.1	antioxidant. AhpC/TSA family	Corynebacterium amycolatum SK46	SLSDYAGKPVfypyrantpbgcteaGVSDVgvvirs
		40063397 gb	AAK38208.1	antioxidant. AhpC/TSA family	Corynebacterium amycolatum SK46	
844	0	84701499 ref	YP_01016074.1	bacterioferritin comigratory protein	Parvularcula bermudensis HTCC2503	LVLAVLffypkddttdgcteaGVSDshskfkekyv
845	1.15E-11	84890745 gb	EAQ01686.1	bacterioferritin comigratory protein	Parvularcula bermudensis HTCC2503	SLSDFKQWLYfypkddttdgcteaGVSKDvmjleira
846	9.09E-17	123698491 ref	YP_001009349.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. AS9601	LVISIFfypkdnrtsgctleakELKKDFSKYNGlsad
		123198601 gb	ABM7024.1	thioredoxin-dependent thiol peroxidase	Prochlorococcus marinus str. AS9601	
847	0	56412627 ref	YP_149702.1	bacterioferritin comigratory protein	Salmonella enterica subsp. enterica serovar Paratyphi A str. ATCC 9150	YFYPKAMTPGCTVQACgjsrdKLSRFAEKELydgihri
		197361562 ref	YP_002141198.1	bacterioferritin comigratory protein	Salmonella enterica subsp. enterica serovar Paratyphi A str. AKU_12601	
		56126884 gb	AAV76390.1	bacterioferritin comigratory protein	Salmonella enterica subsp. enterica serovar Paratyphi A str. AKU_12601	
848	0	159802629 emb	CAR84876.1	bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9211	YFYPKDNITPGCTKEACglskshLKFISKYosegkeli
		159807805 gb	ABX08019.1	putative bacterioferritin comigratory (BCP) protein	Prochlorococcus marinus str. MIT 9211	
849	2.93E-14	85709963 ref	YP_01041028.1	Bcp. bacterioferritin comigratory protein	Erythrobacter sp. NAP1	FFYPKDNITPGCTTEAKGVsvkdKHQNFKAHDArdkilaq
		85688673 gb	EAQ28677.1	Bcp. bacterioferritin comigratory protein	Erythrobacter sp. NAP1	
850	9.16E-15	162452894 ref	YP_001616261.1	peroxiredoxin	Sorangium cellulosum 'So ce 56'	FFYPKDDTTPGCTAESGVsvdSHQGFADKYRleastrg
		161163476 emb	CAN84781.1	peroxiredoxin	Sorangium cellulosum 'So ce 56'	
851	7.52E-13	89800695 ref	YP_523166.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodolferax ferrireducens T118	YFYPKDNITPGCTTEAMGVsvdSHDFEAKLEvkjlers
		89345432 gb	ABD06935.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodolferax ferrireducens T118	
852	3.94E-11	53719103 ref	YP_108089.1	putative bacterioferritin comigratory protein (detoxification)	Burkholderia pseudomallei K96243	SLSGKGGKLYfypkdnrtsgctglGVSVRDRvrgiers
		76811031 ref	YP_333801.1	anti-oxidant AhpC/TSA family protein	Burkholderia pseudomallei 1710b	
		126438527 ref	YP_001059277.1	anti-oxidant AhpC/TSA family protein	Burkholderia pseudomallei 668	

12645240.1	ref	YP_01066544.1	anti-oxidant AhpC/TSA family protein	Burkholderia pseudomallei 1106a	
134277122	ref	ZP_01763837.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei 305	
161355133	ref	ZP_02101013.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1106b	
161370265	ref	ZP_02109832.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 1710a	
167719204	ref	ZP_02402440.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei DW98	
167738206	ref	ZP_02410980.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 14	
167815395	ref	ZP_02447075.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 91	
167823803	ref	ZP_02455274.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 9	
167845346	ref	ZP_02470854.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei B7210	
167893887	ref	ZP_02481289.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 7894	
167902342	ref	ZP_02489547.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei NGCT 13177	
167910571	ref	ZP_02497668.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei 112	
167918605	ref	ZP_02505696.1	antioxidant. AhpC/TSA family protein	Burkholderia pseudomallei BCC215	
194506200	ref	YP_0020335590.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei 1655	
194510635	ref	YP_002023165.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei Pasteur 52237	
194514635	ref	YP_002050737.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei S13	
52209517	emb	CAH35489.1	putative bacterioferritin comigratory protein (detoxification)	Burkholderia pseudomallei K96243	
76580484	db	ABA49959.1	antioxidant. AhpC/Tsa family	Burkholderia pseudomallei 1710b	
126218020	db	ABN81526.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei 668	
126228043	db	ABN89583.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei 1106a	
134250772	db	EBA50951.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei 305	
157936788	db	ED092458.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei Pasteur 52237	
169654243	db	ED586936.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei S13	
164210041	db	EDUJ07084.1	antioxidant. AhpC/TSA family	Burkholderia pseudomallei 1655	
0	212715773	ref	YP_0332380.1	hypothetical protein BIFCAT_00673	
0	212861740	db	EEB27715.1	hypothetical protein BIFCAT_00673	
3.74E-12	119356320	ref	YP_912964.1	redoxin domain-containing protein	
0	119355669	db	ABL66540.1	Redoxin domain protein	
855	0	125599355	db	EA236135.1	hypothetical protein OsJ_019618
856	6.99E-12	118575395	ref	YP_875138.1	peroxiredoxin
0	118193916	db	ABK76834.1	peroxiredoxin	
857	1.11E-10	114321627	ref	YP_743310.1	redoxin domain-containing protein
0	114228021	db	ABI57820.1	Redoxin domain protein	
858	7.53E-15	843389729	ref	YP_00991281.1	bacterioferritin comigratory protein
0	84376830	db	EA993704.1	bacterioferritin comigratory protein	
859	0	209698806	ref	YP_002263736.1	putative peroxiredoxin bcp (thioredoxin reductase (bacterioferritin comigratory peroxiredoxin bcp (thioredoxin reductase (bacterioferritin comigratory peroxiredoxin bcp))
0	208003789	emb	CA080065.1	peroxiredoxin BcpB	
860	0	169629747	ref	YP_001703396.1	Probable peroxiredoxin BcpB
0	169241714	emb	CAM62742.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	
861	1.85E-13	159040817	ref	YP_001540066.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen
0	157919649	db	ABW10176.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	
862	0	77974619	ref	ZP_00830158.1	COG1225: Peroxiredoxin
863	3.49E-13	120603206	ref	YP_967606.1	redoxin domain-containing protein
0	120563435	db	ABM29179.1	Redoxin domain protein	
864	0	113970671	ref	YP_734470.1	thioredoxin-dependent thiol peroxidase
0	113885361	db	ABI39413.1	Redoxin domain protein	
865	1.23E-09	74317017	ref	YP_314375.1	bacterioferritin comigratory protein
0	74056512	db	AA296992.1	bacterioferritin comigratory protein	
866	2.42E-14	152991280	ref	YP_001357002.1	peroxiredoxin family protein
0	151423141	dbj	BAF70645.1	peroxiredoxin family protein	
867	0	189218991	ref	YP_001939632.1	Peroxiredoxin
0	189185849	db	ACD83034.1	Peroxiredoxin	
868	6.44E-15	50553470	ref	XP_504148.1	YAL10E19448p
0	49650015	emb	CAG71974.1	YAL10E19448p	
869	9.49E-19	188997152	ref	YP_001931403.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen
0	188932219	db	ACD68849.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	
870	1.05E-09	206895418	ref	YP_002247412.1	bacterioferritin comigratory protein. AhpC/TSA family
0	206738035	db	AC117113.1	bacterioferritin comigratory protein. AhpC/TSA family	
871	0	11950321	ref	YP_01625295.1	putative bacterioferritin comigratory protein
0	119460857	db	EAW41948.1	putative bacterioferritin comigratory protein	
872	0	118471271	ref	YP_887530.1	peroxiredoxin Q
0	118172568	db	ABK73454.1	peroxiredoxin Q	
873	1.33E-11	55379538	ref	YP_137388.1	bacterioferritin comigratory protein
0	55232263	db	AAV41762.1	bacterioferritin comigratory protein	
874	0	172041130	ref	YP_001600844.1	bacterioferritin comigratory protein
0	171852434	emb	CA005410.1	bacterioferritin comigratory protein	
875	5.88E-15	56750892	ref	YP_171593.1	bacterioferritin comigratory protein
0	81299453	ref	YP_399863.1	bacterioferritin comigratory protein	
0	5668851	dbj	BAQ79073.1	bacterioferritin comigratory protein	
0	81168334	db	AB56674.1	bacterioferritin comigratory protein	
876	8.06E-11	77463531	ref	YP_353035.1	peroxiredoxin
0	77463531	db	AB56674.1	Rhodobacter sphaeroideus 2.4-1	

126462387	ref	YP_001043501.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodobacter sphaeroideus ATCC 17029
7387949	gb	ABA78134.1	Peroxiredoxin	Rhodobacter sphaeroideus 2.4.1
126104051	gb	ABN78729.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodobacter sphaeroideus ATCC 17029
7_55E-11	ref	NP_420678.1	bacterioferritin comigratory protein	Caulobacter crescentius CB15
13423316	gb	AAK23846.1	bacterioferritin comigratory protein	Caulobacter crescentius CB15
2_47E-13	ref	YP_001242728.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Staphylococcus aureus subsp. aureus JH9
148263635	ref	YP_001317072.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Staphylococcus aureus subsp. aureus JH1
150394397	ref	AF0449702.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Staphylococcus aureus subsp. aureus JH9
147241404	gb	ABR52785.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Staphylococcus aureus subsp. aureus JH1
149946849	gb	ABR52785.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Chlorobium tepidum TJS
880	0	21673494	bacterioferritin comigratory protein	Plasmodium yoelii yoelii
5_52E-14	ref	AAAM7190.1	AlpC/TSA family, putative	Plasmodium yoelii yoelii str. 17XNL
82539279	ref	XP_724040.1	AlpC/TSA family, putative	Campylobacter coli RM12228
23478548	gb	EAA15605.1	AlpC/TSA family, putative	Campylobacter coli RM12228
571683391	ref	ZP_00367625.1	bacterioferritin comigratory protein homolog GJ0271	Arthrobacter chlorohemicolus A6
57020189	gb	EAL58873.1	bacterioferritin comigratory protein homolog GJ0271	Arthrobacter chlorohemicolus A6
169174463	ref	ZP_02836364.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylobacterium infernum V4
189219838	ref	YP_001940479.1	Peroxiredoxin	Methylobacterium infernum V4
189186696	gb	ACD8388.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylobacterium infernum V4
209521353	ref	ZP_03270067.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia sp. H160
209498212	gb	EDJ98353.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia sp. H160
15922428	ref	NP_378097.1	thioredoxin peroxidase	Sulfolobus tokodaii str. 7
15623217	dbj	BA867206.1	150aa long hypothetical thioredoxin peroxidase	Sulfolobus tokodaii str. 7
196229972	ref	ZP_03128836.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chthoniobacter flavus Elin428
196228268	gb	EDJ_20804.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chthoniobacter flavus Elin428
85705245	ref	ZP_01036344.1	AlpC/TSA family protein	Roseovarius sp. 217
85670118	gb	EAO24980.1	AlpC/TSA family protein	Roseovarius sp. 217
196192803	gb	EDX87767.1	Redoxin superfamily	Synechococcus sp. PCC 7335
7396065	ref	YP_339640.1	thioredoxin-dependent thiol peroxidase	Pseudocalteromonas haloplanctis TAC125
76674976	emb	CAI8619.1	putative peroxidoxin	Pseudocalteromonas haloplanctis TAC125
88658558	ref	YP_507352.1	anti-oxidant AlpC/TSA family protein	Ehrlichia chaffeensis str. Arkansas
16800015	gb	ABD04684.1	antioxidant, AlpC/TSA family	Ehrlichia chaffeensis str. Arkansas
210134335	ref	YP_002300774.1	bacterioferritin comigratory protein	Helicobacter pylori P12
121013203	gb	ACJ07294.1	bacterioferritin comigratory protein	Helicobacter pylori P12
159026537	emb	CAO86469.1	unnamed protein product	Microcystis aeruginosa PCC 7806
116252337	ref	YP_768175.1	putative AlpC-TSA family protein	Rhizobium leguminosarum bv. viciae 3841
115268985	emb	CAK08079.1	putative AlpC-TSA family protein	Rhizobium leguminosarum bv. viciae 3841
196238176	ref	ZP_03136952.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanoshece sp. PCC 7425
196217966	gb	EDY12609.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanoshece sp. PCC 7425
58617228	ref	YP_196427.1	bacterioferritin comigratory protein	Ehrlichia ruminantium str. Gardel
58416840	emb	CAI27953.1	Bacterioferritin comigratory protein	Ehrlichia ruminantium str. Gardel
108762397	ref	YP_634435.1	AlpC/TSA family protein	Mycococcus xanthus DK 1622
108466277	gb	ABF91462.1	AlpC/TSA family protein	Mycococcus xanthus DK 1622
37520075	ref	NP_923452.1	bacterioferritin comigratory protein	Gloeobacter violaceus PCC 7421
35211067	dbj	BAC38847.1	bacterioferritin comigratory protein	Gloeobacter violaceus PCC 7421
22298737	ref	NP_681984.1	bacterioferritin comigratory protein	Thermosynechococcus elongatus BP-1
22294918	dbj	BAC08746.1	bacterioferritin comigratory protein	Thermosynechococcus elongatus BP-1
75759483	ref	ZP_00739574.1	thioredoxin peroxidase	Bacillus thuringiensis serovar israelensis AT CC 35646
74493901	gb	EAO56136.1	thioredoxin peroxidase	Bacillus thuringiensis serovar israelensis AT CC 35646
193078036	gb	ABO12962.2	bacterioferritin comigratory protein	Acinetobacter baumannii ATCC 17978
170732516	ref	YP_001764463.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia cenocepacia MCO-3
169815758	gb	ACA90341.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia cenocepacia MCO-3
11080277	ref	YP_697583.1	AlpC/TSA family protein	Clostridium perfringens SM101
110883278	gb	ABC86648.1	AlpC/TSA family protein	Clostridium perfringens SM101
87901398	ref	ZP_01084239.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. WH 5701
87284366	gb	EAQ76319.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. WH 5701
212710880	ref	ZP_03319008.1	hypothetical protein PROVALCAL_01948	Providencia alcalifaciens DSM 30120
212688657	gb	EEB48105.1	hypothetical protein PROVALCAL_01948	Providencia alcalifaciens DSM 30120
115468006	ref	NP_001057052.1	Ost06g0196300	Oryza sativa (japonica cultivar-group)
158517782	ref	POC504.1	PRXQ_ORYSJ RecName: Full=Putative peroxidoxin Q, chloroplast; PRXQ_ORYSJ	Oryza sativa subsp. indica (Rice)
158517783	ref	POC505.1	PRXQ_ORYSJ RecName: Full=Peroxidoxin Q, chloroplastic; AltName: Putative peroxidoxin Q	Oryza sativa subsp. japonica (Rice)
51090743	dbj	BAD35223.1	putative peroxidoxin Q	Oryza sativa Japonica Group
113595092	dbj	BAF18966.1	Ost06g0196300	Oryza sativa (japonica cultivar-group)
215765468	dbj	BAG87165.1	unnamed protein product	Oryza sativa Japonica Group
218197740	gb	EEC80167.1	hypothetical protein Ost_22010	Oryza sativa Indica Group
28899049	ref	NP_798654.1	thioredoxin-dependent thiol peroxidase	Vibrio parahaemolyticus RIMD 2210833
28807268	dbj	BAC60538.1	bacterioferritin comigratory protein	Vibrio parahaemolyticus RIMD 2210833
15602917	ref	NP_245989.1	thioredoxin-dependent thiol peroxidase	Pasteurella multocida subsp. multocida str. Pm70
12721387	dbj	AAK03136.1	Bcp	Pasteurella multocida subsp. multocida str. Pm70
89890726	ref	ZP_01202235.1	peroxidoxin, AlpC/Tsa family	Flavobacterium bacterium BBFL7
89516871	gb	EAS19529.1	peroxidoxin, AlpC/Tsa family	Flavobacterium bacterium BBFL7

910	5.08E-14	118052435	ref	ZP_01520982.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Comamonas testosteroni KF-1	YFYPKDNTPGCTTEAMGvsrdSHDNFKFLEKLEvkglers
911	0	118000563	db	EAIV14720.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Comamonas testosteroni KF-1	YFYPKDNTPGCTTEAMGvsrdSHDNFKFLEKLEKLEvkglers
911	0	108904609	ref	YP_644546.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rubrobacter xylanophilus DSM 9941	YFYPKDNTPGCTTEAMGvsrdSHDNFKFLEKLEKLEvkglers
912	0	108768682	gb	ABG04734.1	Redoxin	Rubrobacter xylanophilus DSM 9941	YFYPKDNTPGCTTEAMGvsrdSHDNFKFLEKLEKLEvkglers
912	0	2126335529	ref	YP_002312054.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Shewanella piezotolerans WP3	YFYPKASTPGCTVQAGcgspsdKPKLKFSDKQSYdghlri
913	0	212557013	gb	ACJ29487.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Shewanella piezotolerans WP3	YFYPKASTPGCTVQAGcgspsdKPKLKFSDKQSYdghlri
913	0	157413324	ref	YP_001484190.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. MIT 9215	LVLGIIlyfypkdstlpgctkeacELKDKFKYNgjsad
914	1.33E-13	452395664	ref	ABV50604.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. MIT 9215	YFYPKDNTPGCTTEGGgjsrdsHDSHFQSKQKvrglrs
915	0	53755498	emb	CAH16995.1	hypothetical protein IP2752	Legionella pneumophila str. Lens	YFYPKDNTPGCTTEGGgjsrdsHDSHFQSKQKvrglrs
915	0	116786096	gb	ABK23972.1	hypothetical protein	Picea sitchensis	PPVKIVSfypkdstlpgctkeacGISGDshkklakky
916	9.58E-12	103487665	ref	YF_617226.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Spinopyxis alaskensis RB2256	YFYPKADTPGCTTEAGavsrKGLGKFRDKYGYmgls
917	0	193215190	ref	YF_001996379.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Spinopyxis alaskensis RB2256	YFYPKADTPGCTTEAGavsrKGLGKFRDKYGYmgls
917	0	107100449	ref	YF_922527.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chloropecton thalassium ATCC 35110	EVGSEAFyypkdstlpgctkeacGVSVDhkhkfaeye
918	2.26E-13	943010907	ref	YF_584117.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chloropecton thalassium ATCC 35110	YFYPKDNTPGCTTEAMgirsrdsHSHFNKAKLEvrglrs
919	0	119715562	ref	ABF09848.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ralstonia metallidurans CH84	YFYPKDNTPGCTTEAMgirsrdsHSHFNKAKLEvrglrs
920	0	169349662	gb	ABL80840.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ralstonia metallidurans CH84	YFYPKDNTPGCTTEAMgirsrdsHSHFNKAKLEvrglrs
921	1.33E-09	218961834	ref	YP_001741609.1	redoxin domain-containing protein	Nocardioideae sp. JS614	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
922	3.65E-09	15698205	ref	NP_249899.1	Redoxin domain protein	Nocardioideae sp. JS614	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
922	0	167730491	emb	CAO81403.1	hypothetical protein CLOSP1_00400	Clostridium sporotome DSM 1552	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
923	0	19437169	ref	YP_002018963.1	hypothetical protein PaerFA_01001474	Clostridium sporotome DSM 1552	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
924	0	56963091	ref	YP_174818.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Candidatus Cloacamonas acidaminovorans	FSHPADFVPCVTEFVfypkdstlpgctkeacGVSIDhkhkfaeye
925	0	56909330	db	IBAD63857.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Candidatus Cloacamonas acidaminovorans	FSHPADFVPCVTEFVfypkdstlpgctkeacGVSIDhkhkfaeye
926	3.90E-11	134293895	ref	YP_001159675.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Candidatus Cloacamonas acidaminovorans	FSHPADFVPCVTEFVfypkdstlpgctkeacGVSIDhkhkfaeye
927	1.16E-09	15937563	ref	NP_298251.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Candidatus Cloacamonas acidaminovorans	FSHPADFVPCVTEFVfypkdstlpgctkeacGVSIDhkhkfaeye
928	1.71E-14	218887946	ref	ACL09789.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa PAO1	TLSALyypkdstlpgctkeacGVSIDhkhkfaeye
929	3.92E-11	172060823	ref	YP_001608475.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa PAO1	TLSALyypkdstlpgctkeacGVSIDhkhkfaeye
930	0	171993340	gb	ACB64259.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa PAO1	TLSALyypkdstlpgctkeacGVSIDhkhkfaeye
931	0	165928657	ref	ZP_02222689.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
932	7.81E-11	28871102	ref	NP_703721.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
933	5.61E-16	186683152	ref	YP_001966812.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
934	0	197284525	ref	YP_002151297.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
935	6.13E-13	21872423	gb	EED23640.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
936	0	163762166	ref	ZP_02169232.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
937	0	42779671	ref	NP_976918.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
938	2.95E-17	165976265	ref	YP_001651858.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
939	0	165876366	gb	AB769414.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri
939	0	168051403	ref	XP_001778144.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas aeruginosa C3719	YFYPKADTPGCTTEAGcgspsdVEGVRSHrdldlri



940	3.44E-16	162670466 qb ED057034.1	predicted protein	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Physcomitrella patens subsp. patens
		196244566 ref ZP_03144289.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanosche sp. PCC 8802	
		192003633 qb EDY01329.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanosche sp. PCC 8802	
		160900654 ref YP_001566236.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Deiflia acidovorans SPH-1	
		160366238 qb ABX37851.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Deiflia acidovorans SPH-1	
		83857587 ref ZP_00951115.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Croceibacter atlanticus HTCC2559	
		83849854 qb EAP26823.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Croceibacter atlanticus HTCC2559	
		487923766 ref YP_001895428.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Burkholderia phytofirmans PsJN	
		187714980 qb ACD16204.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia phytofirmans PsJN	
		59800774 ref YP_0027486.1	hypothetical protein NGO0328	Neisseria gonorrhoeae FA 1090	
		59717669 qb AAW89074.1	conserved hypothetical protein	Neisseria gonorrhoeae FA 1090	
		148263675 ref YP_001244135.1	nitroreductase	Thermotoga petrophila RKU-1	
		147735219 qb ABQ46559.1	nitroreductase	Thermotoga petrophila RKU-1	
		214040565 qb EE881213.1	bacterioferritin comigratory protein/NADH dehydrogenase	Marinotoga piezophila KA3	
		187478656 ref YP_786680.1	antioxidant protein	Bordetella avium 197N	
		115423242 emb CAJ49775.1	putative antioxidant protein	Bordetella avium 197N	
		217034184 ref ZP_03439603.1	hypothetical protein HP9810_886921	Helicobacter pylori 98-10	
		216943352 qb EEC22811.1	hypothetical protein HP9810_886921	Helicobacter pylori 98-10	
		149914722 ref ZP_01903252.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseobacter sp. AzwK-3b	
		149811515 qb EDM71350.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseobacter sp. AzwK-3b	
		166367233 ref YP_001659506.1	bacterioferritin comigratory protein	Microcystis aeruginosa NIES-843	
		166089606 qb BAQ04314.1	bacterioferritin comigratory protein homolog	Microcystis aeruginosa NIES-843	
		113953387 ref YP_731702.1	bacterioferritin comigratory protein	Synechococcus sp. CC9311	
		113880738 qb ABI45696.1	bacterioferritin comigratory protein	Synechococcus sp. CC9311	
		115361853 ref YP_773892.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ambifaria AMMD	
		115281841 qb ABI87398.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ambifaria AMMD	
		110880198 ref YP_683205.1	bacterioferritin comigratory protein	Roseobacter denitrificans OCH 114	
		109456314 qb ABG32519.1	bacterioferritin comigratory protein	Roseobacter denitrificans OCH 114	
		118472116 ref YP_889011.1	antioxidant, AhpC/TSA family protein	Mycobacterium smegmatis str. MC2 155	
		118173403 qb ABK74299.1	antioxidant, AhpC/TSA family protein	Mycobacterium smegmatis str. MC2 155	
		184200729 ref YP_001854936.1	putative peroxiredoxin	Kouarea thizophila DC2201	
		183860859 qb BAQ29430.1	putative peroxiredoxin	Kouarea thizophila DC2201	
		37522958 ref NP_926335.1	bacterioferritin comigratory protein	Gloeobacter violaceus PCC 7421	
		35213960 qb BAQ91330.1	bacterioferritin comigratory protein	Gloeobacter violaceus PCC 7421	
		126695718 ref YP_001090604.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9301	
		126642761 qb ABO17003.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9301	
		197940186 ref ZP_03178006.1	bacterioferritin comigratory protein	Streptomyces sp. SPB74	
		197763764 ref YP_002186922.1	bacterioferritin comigratory protein	Streptomyces sp. SPB74	
		197697484 qb EDY44417.1	bacterioferritin comigratory protein	Streptomyces sp. SPB74	
		167762575 ref ZP_02434702.1	hypothetical protein BACSTE_00931	Bacteroides stercoris ATCC 43183	
		167699661 qb EDS18260.1	hypothetical protein BACSTE_00931	Bacteroides stercoris ATCC 43183	
		27365256 ref NP_760784.1	thioredoxin-dependent thiol peroxidase	Vibrio vulnificus CMCP6	
		27361403 qb JAAO10311.1	AED18803_98 Bacterioferritin comigratory protein	Vibrio vulnificus CMCP6	
		209574088 qb ACI62992.1	peroxiredoxin AhpC-Tsa family protein	Acidithiobacillus caldus	
		33863889 ref NP_895449.1	putative bacterioferritin comigratory protein (BCP) protein	Prochlorococcus marinus str. MIT 9313	
		33635422 emb CAE21797.1	putative bacterioferritin comigratory protein	Prochlorococcus marinus str. MIT 9313	
		194535571 ref YP_002070743.1	bacterioferritin comigratory protein	Vibrio cholerae RC385	
		150420365 qb EDN1266.1	bacterioferritin comigratory protein	Vibrio cholerae RC385	
		193212328 ref YP_001998281.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobaculum parvum NCIB 8327	
		193085605 qb ACF 11081.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobaculum parvum NCIB 8327	
		126667511 ref ZP_01738482.1	AhpC/TSA family protein	Marinobacter sp. ELB17	
		126628103 qb EAZ98729.1	AhpC/TSA family protein	Marinobacter sp. ELB17	
		126458692 ref YP_001054970.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pyrobaculum caldifontis JCM 11548	
		126248413 qb ABO07504.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pyrobaculum caldifontis JCM 11548	
		16821828 ref ZP_02633851.1	antioxidant, AhpC/TSA family	Clostridium perfringens B str. JGS 1987	
		169344705 ref ZP_02865668.1	antioxidant, AhpC/TSA family	Clostridium perfringens B str. JGS 1987	
		169297172 qb EDS79286.1	antioxidant, AhpC/TSA family	Clostridium perfringens C str. JGS1495	
		170660847 qb EDT13530.1	antioxidant, AhpC/TSA family	Clostridium perfringens B str. JGS 1987	
		170710223 qb EDT122405.1	antioxidant, AhpC/TSA family	Clostridium perfringens B str. ATCC 3626	
		158339081 ref YP_001520258.1	alkyl hydroperoxide reductase/Thiol specific antioxidant family protein	Acarochlois marina MBIC11017	
		158309322 qb ABW30939.1	alkyl hydroperoxide reductase/Thiol specific antioxidant family protein	Acarochlois marina MBIC11017	
		151943147 qb EDM61482.1	thioredoxin peroxidase	Saccharomyces cerevisiae YJM789	
		190408233 qb EDY09500.1	peroxiredoxin D015	Saccharomyces cerevisiae RM11-1a	
		208780124 ref ZP_03247467.1	antioxidant, AhpC/TSA family protein	Francisella novicida FTG	
		208744128 qb EDZ90429.1	antioxidant, AhpC/TSA family protein	Francisella novicida FTG	
		13235522 emb CAC33649.1	Bacterioferritin comigratory protein	Rickettsia montanensis	
		149179925 ref ZP_01857503.1	bacterioferritin comigratory protein	Planctomycetes maris DSM 8797	
		148842264 qb EDI_56649.1	bacterioferritin comigratory protein	Planctomycetes maris DSM 8797	
		85059706 ref YP_455408.1	thioredoxin-dependent thiol peroxidase	Sodalis glossinidius str. 'moritans'	
		84780226 qb BAE15003.1	bacterioferritin comigratory protein	Sodalis glossinidius str. 'moritans'	

973	8.33E-13	126735607.ref	ZP_01751352.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseobacter sp. CCS2		YLSDFAGKVIYFKDKIDPDKCQKALGYSKDAQGIKQ
974	1.31E-10	126714794.gb	EBAA11660.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseobacter sp. CCS2		YFYPKDNTPGCTTQGGQYSDTHENFKAKKQSYGVYDS
975	2.19E-11	66044792.ref	YP_2346833.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas syringae pv. syringae B72Ba		YFYPKDSSTPGCTTEGLSHUNTCAGKVLGIERSLISPD
976	4.11E-14	63255489.gb	AA736595.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas syringae pv. syringae B72Ba		KPSATKSSAIFfYpkampicreaiGVASDfqiirt
977	2.71E-16	188575943.gb	YP_001912872.1	bacterioferritin comigratory protein	Xanthomonas oryzae pv. oryzae PXO99A		YFYPKALTPGCTTQACGJSPDKLAQHIEKKEydgihri
978	0	188520395.gb	ACD568340.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Xanthomonas oryzae pv. oryzae PXO99A		SLDGFAGKKYfYpkamipgctvtqagVSDyIDydgihri
979	0	192291113.ref	ZP_02299011.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodopseudomonas palustris TIE-1		YFYPKDNTPGCTKEAVGSDIASHKHFIEKFNKmgiers
980	0	192284862.gb	ACF01243.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Rhodopseudomonas palustris TIE-1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
981	0	428279178.ref	ZP_00155263.1	COG1225: Peroxiredoxin	Haemophilus influenzae R2644		YFYPKDNTPGCTLEAKGVSPDSHQKFISSOCShwgiers
982	0	145631072.ref	ZP_01786684.1	bacterioferritin comigratory protein	Haemophilus influenzae R2644		YFYPKDNTPGCTTQACGJSPDKLAQHIEKKEydgihri
983	0	14983357.gb	EDJ90839.1	thioredoxin-dependent thiol peroxidase	Haemophilus influenzae R3021		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
984	0	148718639.gb	ABC09766.1	bacterioferritin comigratory protein	Haemophilus influenzae R3021		YFYPKDNTPGCTLEAKGVSPDSHQKFISSOCShwgiers
985	0	207109511.ref	ZP_03243673.1	bacterioferritin comigratory protein	Helicobacter pylori HPXX_438_CAG0C1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
986	0	166856144.gb	ABY94552.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Vibrio harvey ATCC BAA-1116		YFYPKDNTPGCTTQACGJSPDKLAQHIEKKEydgihri
987	0	169811873.gb	ACA86457.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Shewanella woodyi ATCC 51908		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
988	0	207092425.ref	ZP_03240212.1	bacterioferritin comigratory protein	Helicobacter pylori HPXX_438_CAG0C1		YFYPKDNTPGCTLEAKGVSPDSHQKFISSOCShwgiers
989	0	156875458.ref	YP_001446385.1	thioredoxin-dependent thiol peroxidase	Vibrio harvey ATCC BAA-1116		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
990	0	161869694.ref	YP_001598861.1	bacterioferritin comigratory protein	Neisseria meningitidis 053442		YFYPKDNTPGCTTQACGJSPDKLAQHIEKKEydgihri
991	0	161869694.ref	YP_001598861.1	bacterioferritin comigratory protein	Neisseria meningitidis 053442		YFYPKDNTPGCTTQACGJSPDKLAQHIEKKEydgihri
992	0	196949488.ref	YP_933701.1	putative bacterioferritin comigratory protein	Azoarcus sp. BH72		YFYPKDNTPGCTTQACGJSPDKLAQHIEKKEydgihri
993	0	119670901.emb	CAL94814.1	putative bacterioferritin comigratory protein	Azoarcus sp. BH72		YFYPKDNTPGCTTQACGJSPDKLAQHIEKKEydgihri
994	0	15418802.gb	AAK67508.1	peroxiredoxin	Protonibacterium freudenreichii subsp. shermanii		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
995	0	15899027.ref	NP_343633.2	Peroxiredoxin, bacterioferritin comigratory protein homolog (bcp-3)	Sulfobobus solifarius P2		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
996	0	13615558.gb	AAK42422.1	thioredoxin-dependent thiol peroxidase	Sulfobobus solifarius P2		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
997	0	109893795.ref	YP_662050.1	thioredoxin-dependent thiol peroxidase	Pseudocitronomonas atlantica T6c		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
998	0	109701076.gb	ABC040996.1	Redoxin	Pseudocitronomonas atlantica T6c		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
999	0	212223935.ref	YP_002307171.1	Hypothetical peroxiredoxin, bacterioferritin comigratory protein	Thermococcus onnurineus NA1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1000	0	212008892.gb	ACJ16274.1	Hypothetical peroxiredoxin, bacterioferritin comigratory protein	Thermococcus onnurineus NA1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1001	0	167562233.gb	ZP_0235149.1	antioxidant, AtpC/TSA family protein	Burkholderia oklahomaensis EO147		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1002	0	537125016.ref	YP_084988.1	putative bacterioferritin co-migratory protein	Bacteroides fragilis YCH46		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1003	0	52216371.gb	BA047964.1	putative bacterioferritin co-migratory protein	Bacteroides fragilis YCH46		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1004	0	190571297.ref	YP_001975655.1	bacterioferritin comigratory protein	Wobachia endosymbiont of Culex quinquefasciatus Pel		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1005	0	213018694.ref	ZP_03334502.1	bacterioferritin comigratory protein	Wobachia endosymbiont of Culex quinquefasciatus Pel		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1006	0	190357569.emb	CAO50008.1	bacterioferritin comigratory protein	Wobachia endosymbiont of Culex quinquefasciatus Pel		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1007	0	212995645.gb	EEB56285.1	bacterioferritin comigratory protein	Oceanobacillus theyensis HTE831		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1008	0	230983358.ref	NP_691824.1	bacterioferritin comigratory protein	Oceanobacillus theyensis HTE831		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1009	0	22776584.gb	BAC12859.1	bacterioferritin comigratory protein	Dichelobacter nodosus VCS1703A		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1010	0	146328680.ref	YP_001209467.1	alkyl hydroperoxide reductase/thiol specific antioxidant family protein	Dichelobacter nodosus VCS1703A		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1011	0	146232150.gb	ABQ13128.1	alkyl hydroperoxide reductase/thiol specific antioxidant family protein	Dichelobacter nodosus VCS1703A		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1012	0	336658141.ref	NP_897373.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Synechococcus sp. WH 8102		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1013	0	33632984.emb	CAE07795.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Synechococcus sp. WH 8102		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1014	0	209910005.ref	ZP_03284489.1	hypothetical protein ENTCAN_04321	Enterobacter cancerogenus ATCC 35316		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1015	0	209898600.gb	EEA12299.1	hypothetical protein ENTCAN_04321	Enterobacter cancerogenus ATCC 35316		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1016	0	149202019.ref	ZP_01879064.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseovarius sp. TM1035		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1017	0	149144189.gb	EDM32220.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Roseovarius sp. TM1035		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1018	0	212698228.ref	ZP_033063556.1	hypothetical protein BACFIN_00681	Bacteroides finegoldii DSM 17565		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1019	0	212670732.gb	EEB31323.1	hypothetical protein BACFIN_00681	Bacteroides finegoldii DSM 17565		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1020	0	116328649.ref	YP_799368.1	bacterioferritin comigratory protein	Leptospira borgpetersenii serovar Hardjo-bovis L550		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1021	0	116328649.ref	YP_799368.1	bacterioferritin comigratory protein	Leptospira borgpetersenii serovar Hardjo-bovis L550		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1022	0	11612542.gb	ABJ0435.1	Bacterioferritin comigratory protein	Leptospira borgpetersenii serovar Hardjo-bovis L550		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1023	0	11612402.gb	ABJ77494.1	Bacterioferritin comigratory protein	Leptospira borgpetersenii serovar Hardjo-bovis L550		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1024	0	124363009.gb	ABN06817.1	hypothetical protein Mab_0644	Methanococcus marisnigri DSM 11463		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1025	0	19509135.ref	ZP_01628286.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methanococcus marisnigri DSM 11463		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1026	0	119466301.gb	EAIV47187.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nodularia spumigena CCY9414		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1027	0	148556714.ref	YP_001264403.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Nodularia spumigena CCY9414		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1028	0	148502011.gb	ABQ070265.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Spinomonas wittichii RW1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1029	0	217071008.ref	YP_002334824.1	bacterioferritin comigratory protein, AtpC/TSA family	Spinomonas wittichii RW1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1030	0	217038961.gb	ACJ75483.1	bacterioferritin comigratory protein, AtpC/TSA family	Thermosiphon africanus TCF-52B		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1031	0	320333224.ref	YP_00135320.1	COG1225: Peroxiredoxin	Thermosiphon africanus TCF-52B		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1032	0	126208322.ref	YP_001053547.1	thioredoxin-dependent thiol peroxidase	Actinobacillus pleuropneumoniae serovar 1 str. 4074		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1033	0	126097114.gb	ABN73942.1	putative peroxiredoxin Bop	Actinobacillus pleuropneumoniae L20		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1034	0	148255347.ref	YP_001239932.1	hypothetical protein BBta_3956	Bradyrhizobium sp. BTA1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1035	0	146407520.gb	ABC03626.1	hypothetical protein BBta_3956	Bradyrhizobium sp. BTA1		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri
1036	0	169632729.ref	YP_001706465.1	bacterioferritin comigratory protein	Acinetobacter baumannii SDF		YFYPKASITPGCTVQAGJSPDKLARLSDKQSYDGihri

		169795073.ref	YP_001712866.1	bacterioferritin comigratory protein	Acinetobacter baumannii AYE
		213158265.ref	YP_002320316.1	bacterioferritin comigratory protein	Acinetobacter baumannii AB0057
		215482623.ref	YP_002320481.1	AhpC/TSA family protein	Acinetobacter baumannii AB307-0294
		169148000.emb	CAI065963.1	bacterioferritin comigratory protein	Acinetobacter baumannii
		169151521.emb	CAP00286.1	bacterioferritin comigratory protein	Acinetobacter baumannii
		213057425.gb	ACJ42327.1	bacterioferritin comigratory protein	Acinetobacter baumannii AB0057
		213987727.gb	ACJ58026.1	AhpC/TSA family protein	Acinetobacter baumannii AB307-0294
1006	8.66E-15	167627034.ref	YP_001677534.1	bacterioferritin comigratory protein	Francisella philomiragia subsp. philomiragia ATCC 25017
1007	5.34E-13	149918477.ref	YP_01906967.1	bacterioferritin comigratory protein	Francisella philomiragia subsp. philomiragia ATCC 25017
		149820777.gb	EDM80187.1	antioxidant. AhpC/Tsa family protein	Plesiocystis pacifica SIR-1
		31793702.ref	NP_856195.1	antioxidant. AhpC/Tsa family protein	Mycobacterium bovis AF2122/97
1008	0	31619295.emb	CAD97411.1	PROBABLE BACTERIOFERRITIN COMIGRATORY PROTEIN BCP	Mycobacterium bovis AF2122/97
1009	1.96E-10	489220134.ref	YP_001940774.1	Peroxioredoxin	Methylobacterium inferorum V4
		169186982.gb	ACI084177.1	Peroxioredoxin	Methylobacterium inferorum V4
1010	8.40E-13	145990363.ref	YP_001152385.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Pyrobaculum arsenaticum DSM 13514
		145282131.gb	ABP48713.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Pyrobaculum arsenaticum DSM 13514
1011	4.79E-12	116624029.ref	YP_826185.1	redoxin domain-containing protein	Solibacter ustulatus Ellim6076
		116227191.gb	AB_185900.1	Redoxin domain protein	Solibacter ustulatus Ellim6076
1012	0	153813080.ref	YP_01965748.1	hypothetical protein RUMOBE_03488	Ruminococcus obeum ATCC 29174
		149830882.gb	EDM85972.1	hypothetical protein RUMOBE_03488	Ruminococcus obeum ATCC 29174
1013	3.86E-09	197621838.gb	EDY34418.1	Redoxin superfamily	Aciduliprofundum boonei T469
1014	0	153951008.ref	YP_001398680.1	anti-oxidant AhpC/TSA family protein	Campylobacter jejuni subsp. doylei 269.97
		152938454.gb	ABS43195.1	antioxidant. AhpC/Tsa family	Campylobacter jejuni subsp. doylei 269.97
1015	0	94492222.ref	YP_01305760.1	bacterioferritin comigratory protein	Oceanobacter sp. RED65
		94428684.gb	EAT13826.1	bacterioferritin comigratory protein	Oceanobacter sp. RED65
1016	0	91775639.ref	YP_545295.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Methylobacillus flagellatus KT
		91709526.gb	ABE49454.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Methylobacillus flagellatus KT
1017	2.40E-13	116074603.gb	EDM27671.1	putative bacterioferritin comigratory protein	Synechococcus sp. RS9916
		116067825.gb	EALU73578.1	putative bacterioferritin comigratory protein	Synechococcus sp. RS9916
1018	4.45E-15	94495758.ref	YP_013022338.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Spinomonas sp. SKA58
		94425146.gb	EAT10167.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Spinomonas sp. SKA58
1019	0	149197698.ref	YP_01874748.1	AhpC/TSA family protein	Lentisphaera araneosa HTCC2155
		149139268.gb	EDM27671.1	AhpC/TSA family protein	Lentisphaera araneosa HTCC2155
1020	2.82E-14	196191498.gb	EBA03283.1	antioxidant. AhpC/TSA family	Synechococcus sp. PCC 7335
1021	3.79E-14	163793636.ref	YP_0218781.1	Redoxin	alpha proteobacterium BAL199
		159181438.gb	EDP65953.1	Redoxin	alpha proteobacterium BAL199
1022	2.07E-16	169186879.ref	YP_02847040.1	Peroxioredoxin	Paenibacillus sp. JDR-2
		169006848.gb	EDS536398.1	Peroxioredoxin	Paenibacillus sp. JDR-2
1023	1.09E-12	126756328.ref	YP_01742169.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Rhodobacteres bacterium HTCC2150
		126704191.gb	EBA03283.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Rhodobacteres bacterium HTCC2150
1024	1.38E-16	78779281.ref	YP_397393.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mai allergen	Prochlorococcus marinus str. MIT 9312
		78712780.gb	ABB49957.1	alkyl hydroperoxide reductase/thiol specific antioxidant/ Mai allergen	Prochlorococcus marinus str. MIT 9312
1025	3.18E-10	71063520.gb	YP_266239.1	bacterioferritin comigratory protein	Candidatus Pelagibacter ubique HTCC1082
		71062633.gb	AA221636.1	bacterioferritin comigratory protein	Candidatus Pelagibacter ubique HTCC1082
1026	0	148259171.ref	YP_001233298.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Acidiphilium cryptum JF-5
		146400852.gb	ABO29379.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Acidiphilium cryptum JF-5
1027	0	148262476.ref	YP_001229184.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Geobacter uranireducens R4
		146395978.gb	ABO24811.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Geobacter uranireducens R4
1028	1.32E-13	15689133.ref	NP_354814.1	bacterioferritin comigratory protein	Agrobacterium tumefaciens str. C58
		86142477.ref	YP_01060987.1	bacterioferritin comigratory protein	Agrobacterium tumefaciens str. C58
1029	0	85831229.gb	EAC49686.1	bacterioferritin comigratory protein	Leuwenhoekella blandensis MED217
1030	1.98E-12	119193178.ref	XP_001247195.1	hypothetical protein ClMG_00966	Coccidioides immitis RS
		90305981.gb	EAS33612.1	hypothetical protein ClMG_00966	Coccidioides immitis RS
1031	4.12E-09	162147216.ref	YP_001601677.1	putative peroxiredoxin	Gluconacetobacter diazotrophicus PAI 5
		209544288.ref	YP_002276497.1	putative peroxiredoxin	Gluconacetobacter diazotrophicus PAI 5
		161785703.emb	CAP56364.1	putative peroxiredoxin	Gluconacetobacter diazotrophicus PAI 5
1032	0	209531945.gb	ACI51882.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mai allergen	Gluconacetobacter diazotrophicus PAI 5
		158338534.ref	YP_001519711.1	bacterioferritin comigratory protein	Acaryochloris marina MBIC11017
		158308775.gb	ABW30392.1	bacterioferritin comigratory protein	Acaryochloris marina MBIC11017
1033	1.04E-13	184159139.ref	YP_001847478.1	peroxiredoxin	Acinetobacter baumannii ACICU
		183210733.gb	ACC5813.1	Peroxioredoxin	Acinetobacter baumannii ACICU
1034	0	79589276.ref	YP_00823001.1	COG1225: Peroxioredoxin	Yersinia bercovieri ATCC 43970
1035	1.26E-10	55379892.ref	YP_137742.1	bacterioferritin comigratory protein	Haloarcula marismortui ATCC 43049
		55232671.gb	AAV48036.1	bacterioferritin comigratory protein	Haloarcula marismortui ATCC 43049
1036	2.49E-13	58698387.ref	YP_00373300.1	antioxidant. AhpC/Tsa family	Wobachia endosymbiont of Drosophila ananassae
		58535100.gb	EAL59186.1	antioxidant. AhpC/Tsa family	Wobachia endosymbiont of Drosophila ananassae
1037	0	29831719.ref	NP_826353.1	bacterioferritin comigratory protein	Streptomyces avermitilis MA-4680
		29603835.dbj	BAC72888.1	putative bacterioferritin comigratory protein	Streptomyces avermitilis MA-4680
1038	3.29E-09	84503042.ref	YP_01001138.1	AhpC/TSA family protein	Oceanicola batsensis HTCC2597

1039	84388586 gb	EAQ01458.1	AhpC/TSA family protein	Oceaniicola batsensis HTCC2597	YFPKDDTTPGCTKEAAGGVSVDLQIKKFMNGEN
1040	169190716 ref	ZP_028506336.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Paenibacillus sp. JDR-2	FFYPKDNTPGCTTEATIGVSKDSKHQNFIAKHGdlfad
1041	85375294 ref	YP_4959596.1	putative bacterioferritin comigratory protein	Erythrobacter ifloralis HTCC2594	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1042	84789377 gb	AB064599.1	putative bacterioferritin comigratory protein	Erythrobacter ifloralis HTCC2594	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1043	195953779 gb	YP_002122069.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Hydrogenobaculum sp. Y04AAS1	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1044	87125261 ref	ZP_01081107.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Hydrogenobaculum sp. Y04AAS1	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1045	86167030 gb	EA068291.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. RS9917	LOGKKVLfyrpraspogctwaqGVSPDqIKKfmgken
1046	78189562 ref	YP_379900.1	putative bacterioferritin comigratory (BCP) protein	Synechococcus sp. RS9917	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1047	78189562 ref	YP_379900.1	bacterioferritin comigratory protein, thiol peroxidase, putative	Chlorobium chlorochromati CaD3	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1048	154175068 ref	YP_001407532.1	anti-oxidant AhpC/TSA family protein	Campylobacter curvus 525.92	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1049	112603836 gb	EAU01180.1	antioxidant AhpC/TSA family	Campylobacter curvus 525.92	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1050	89074987 ref	ZP_01181432.1	bacterioferritin comigratory protein	Photobacterium sp. SKA34	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1051	89049226 gb	EAR84790.1	bacterioferritin comigratory protein	Photobacterium sp. SKA34	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1052	15642159 ref	NP_231791.1	thioredoxin-dependent thiol peroxidase	Vibrio cholerae O1 biovar eltor str. NI 6961	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1053	121586629 ref	ZP_01676611.1	bacterioferritin comigratory protein	Vibrio cholerae 2740-80	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1054	153223517 ref	ZP_01953919.1	bacterioferritin comigratory protein	Vibrio cholerae MAK 757	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1055	153818809 ref	ZP_01971476.1	bacterioferritin comigratory protein	Vibrio cholerae NCTC 8457	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1056	153822607 ref	ZP_01975274.1	bacterioferritin comigratory protein	Vibrio cholerae B33	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1057	9656713 gb	AAF95305.1	bacterioferritin comigratory protein	Vibrio cholerae MO10	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1058	124118155 gb	EAY36898.1	bacterioferritin comigratory protein	Vibrio cholerae OT biovar EI Tor str. NI 6961	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1059	121548936 gb	EAX59035.1	bacterioferritin comigratory protein	Vibrio cholerae 2740-80	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1060	1266510652 gb	EAZ73246.1	bacterioferritin comigratory protein	Vibrio cholerae MAK 757	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1061	1266510652 gb	EAZ73246.1	bacterioferritin comigratory protein	Vibrio cholerae NCTC 8457	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1062	1266510652 gb	EAZ73246.1	bacterioferritin comigratory protein	Vibrio cholerae B33	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1063	2059539594 ref	YP_002227395.1	hypothetical protein SG2521	Salmoneella enterica subsp. enterica serovar Gallinarum str. 287/91	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1064	205273375 emb	CAR38347.1	conserved hypothetical protein	Salmoneella enterica subsp. enterica serovar Gallinarum str. 287/91	YFYPKDDTTPGCTKEACGVSPDSSHKKFKFKEYGtKgjlr
1065	3242984 gb	AA0238865.1	merozoit capling protein-1	Plasmodium falciparum	FTYPKAMTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1066	1912130633 ref	XP_002181851.1	predicted protein	Phaeoactylum tricornutum CCAP 1055/1	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1067	2174008452 gb	EEC46391.1	predicted protein	Phaeoactylum tricornutum CCAP 1055/1	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1068	37680690 ref	NP_935299.1	thioredoxin-dependent thiol peroxidase	Vibrio vulnificus YJ016	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1069	37199439 dbj	BAC95270.1	bacterioferritin comigratory protein	Vibrio vulnificus YJ016	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1070	86739625 ref	YP_480025.1	bacterioferritin comigratory protein	Vibrio vulnificus YJ016	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1071	86656487 gb	ABD10236.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Frankia sp. Ccl3	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1072	1599033398 ref	YP_001650742.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. MIT 9211	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1073	159888574 gb	ABX08788.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Prochlorococcus marinus str. MIT 9211	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1074	1266989430 ref	YP_001088327.1	putative thiol peroxidase (bacterioferritin comigratory protein)	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1075	145954711 ref	ZP_01803716.1	hypothetical protein CbfQ_04002.109	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1076	168695648 ref	ZP_02727925.1	putative thiol peroxidase (bacterioferritin comigratory protein)	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1077	168715454 ref	ZP_02747731.1	putative thiol peroxidase (bacterioferritin comigratory protein)	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1078	168723754 ref	ZP_02756003.1	putative thiol peroxidase (bacterioferritin comigratory protein)	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1079	168730469 ref	ZP_02762746.1	putative thiol peroxidase (bacterioferritin comigratory protein)	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1080	196162074 ref	ZP_031228335.1	putative thiol peroxidase (bacterioferritin comigratory protein)	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1081	1152505067 emb	CAJ68692.1	putative thiol peroxidase (bacterioferritin comigratory protein)	Clostridium difficile 630	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1082	110801399 ref	YP_694722.1	anti-oxidant AhpC/TSA family protein	Clostridium perfringens ATCC 13124	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1083	168215168 ref	ZP_02640793.1	antioxidant AhpC/TSA family	Clostridium perfringens ATCC 13124	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1084	168215168 ref	ZP_02640793.1	antioxidant AhpC/TSA family	Clostridium perfringens ATCC 13124	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1085	182828806 ref	ZP_02954544.1	conserved hypothetical protein	Clostridium perfringens D str. JGS1721	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1086	110676046 gb	ABG585033.1	antioxidant AhpC/TSA family	Clostridium perfringens ATCC 13124	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1087	177907852 gb	ED170450.1	antioxidant AhpC/TSA family	Clostridium perfringens ATCC 13124	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1088	182379727 gb	ED177206.1	antioxidant AhpC/TSA family	Clostridium perfringens D str. JGS1721	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1089	159904051 ref	YP_001551395.1	peroxiredoxin	Clostridium perfringens NCTC 8239	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1090	159889227 gb	ABX09441.1	Peroxiredoxin	Prochlorococcus marinus str. MIT 9211	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1091	177670731 ref	ZP_02943821.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Micrococcus luteus NCTC 2665	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1092	172072159 gb	ED158196.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Micrococcus luteus NCTC 2665	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1093	182437316 ref	YP_001826035.1	hypothetical protein SGR_3523	Streptomyces griseus subsp. griseus NBRC 13350	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1094	178465882 dbj	BA020352.1	conserved hypothetical protein	Streptomyces griseus subsp. griseus NBRC 13350	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1095	19778913 ref	YP_002211781.1	redoxin domain protein	Oligotropha carboxidovorans OM5	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1096	209865120 ref	YP_002288977.1	redoxin domain protein	Oligotropha carboxidovorans OM5	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1097	209873316 gb	AC193112.1	redoxin domain protein	Oligotropha carboxidovorans OM5	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1098	153009592 ref	YP_001370807.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ochrobactrum anthropi ATCC 49188	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1099	151561480 gb	ABS14978.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Ochrobactrum anthropi ATCC 49188	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1100	16087578 ref	YP_001555097.1	thioredoxin-dependent thiol peroxidase	Shewanella baltica OS195	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1101	160861303 gb	ABX48937.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Shewanella baltica OS195	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1102	18313548 ref	NP_988021.5	bacterioferritin comigratory protein	Pyrobaculum aerophilum str. IM2	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1103	18161030 gb	AAL64397.1	bacterioferritin comigratory protein homolog	Pyrobaculum aerophilum str. IM2	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1104	182412973 ref	YP_001818039.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Opitutus terrae PB90-1	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1105	177840187 gb	ACB74439.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Opitutus terrae PB90-1	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK
1106	86605384 ref	YP_474147.1	anti-oxidant AhpC/TSA family protein	Synechococcus sp. JA-3-3Ab	YFYPKDDTTPGCTKEAEGISADSPQKSA TWKRAEKKK

1064	1.23E-11	86553926 gb	ABC98884.1	antioxidant, AhpC/Tsa family	Synechococcus sp. JA-3-3Ab				KGKAAEKETVasgkkaATFYPKASTPGCTGCTKQAGlsand
		169604064.ref	XP_00117954563.1	hypothetical protein SNOG_05041	Phaeosphaeria nodorum SN15				
		11066832.gb	EAT187432.1	hypothetical protein SNOG_05041	Phaeosphaeria nodorum SN15				
1065	0	149371349.ref	ZP_018909835.1	bacterioferritin comigratory protein	unidentified bacterium SCB49				FFYPKASTPGCTAEACgvsadfrQKMFKEKYEYdglhik
		149355487.gb	EDM44046.1	bacterioferritin comigratory protein	unidentified bacterium SCB49				
1066	9.32E-15	70726099.ref	YP_2530113.1	hypothetical protein SH1098	Staphylococcus haemolyticus JCSC14.35				YFYPKDDTPTTCITTEACAgvsqdkHQNFIAKHNAmgvrt
		68446823.dbl	BAE04407.1	unnamed protein product	Staphylococcus haemolyticus JCSC14.35				
1067	4.42E-13	83749904.ref	ZP_00946866.1	oxaloductase, bacterioferritin co-migratory protein	Ralstonia solanaceae UW551				YFYPKDDTPTGCTTEAMlglsrdSHENFKAKLEvgliers
		207743334.ref	YP_002259726.1	bacterioferritin comigratory protein	Ralstonia solanaceae IPO1609				
		837629426.gb	EAP70642.1	oxaloductase, bacterioferritin co-migratory protein	Ralstonia solanaceae UW551				
		206594731.emb	CA061658.1	bacterioferritin comigratory protein	Ralstonia solanaceae IPO1609				
1068	1.24E-12	209527700.ref	ZP_03276197.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Artichopira maxima CS-328				YFYPKDDTTPRCTAEACgvsadEHQKfyGKYNlpgrvly
		209491872.gb	ED292230.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Artichopira maxima CS-328				
1069	4.73E-12	453877316.ref	ZP_02004179.1	AhpC/TSA family protein	Beggiatoa sp. PS				YFYPKDDTTPGCTOEGGGlsrdAMEHEKfoAKYNyrqklr
		453877316.ref	EDN65821.1	AhpC/TSA family protein	Beggiatoa sp. PS				
1070	2.89E-15	110833635.ref	YP_692494.1	AhpC/TSA family protein	Alcanivorax borkumensis SK2				FFYPKALTPGCTTQACglsprLRFKFDIKHfmgllrt
		110646746.emb	CAL16222.1	AhpC/TSA family protein	Alcanivorax borkumensis SK2				
1071	0	156844281.ref	XP_001645204.1	hypothetical protein Kpol_1062p57	Vanderwallozyma polyspora DSM 70294				FAYPRAMTPGCTRQACglsadSOKKFQDKYsqgllirs
		156115862.gb	ED017346.1	hypothetical protein Kpol_1062p57	Vanderwallozyma polyspora DSM 70294				
1072	0	494801338.ref	YP_034797.1	bacterioferritin comigratory protein	Bacillus thuringiensis serovar konkukkian str. 97-27				YFYPKDDTTPGCTTTEACvsylfqrkdlGVSPDymglirs
		49331694.gb	AA1162340.1	bacterioferritin comigratory protein	Bacillus thuringiensis serovar konkukkian str. 97-27				
1073	0	90414072.ref	ZP_01222055.1	bacterioferritin comigratory protein	Photobacterium profundum 3TCK				YFYPKAMTPGCTVQACglsrdLPRFIEIRDndyghlri
		90324867.gb	EAS41395.1	bacterioferritin comigratory protein	Photobacterium profundum 3TCK				
1074	1.77E-11	197103299.ref	YP_002130676.1	bacterioferritin comigratory protein	Phenylbacterium zucineum HL K1				YFYPKDDTTPGCTRQACglsrdSHEKFAAKHGmgldirs
		196478719.gb	AC678247.1	bacterioferritin comigratory protein	Phenylbacterium zucineum HL K1				
1075	3.26E-11	167586997.ref	ZP_02379385.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ubonenis Bu				YFYPKDDTTPGCTTEGLgvsrdSHDNFKAKLEvgliers
		197116621.ref	YP_002137048.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ubonenis Bu				FFYPKDDTTPGCTAEAVslshakisaTIGSIRSRvspsd
1076	4.06E-13	197085981.gb	ACH37252.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Geobacter bemidjensis Bem				
1077	4.23E-10	126728571.ref	ZP_01744392.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Geobacter bemidjensis Bem				FFYPKDDTTPGCTKEENglsrdSHEKFMKKKSfmgliers
		126710507.gb	EBA09558.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Sacittula stellata E-37				
1078	1.74E-12	213405903.ref	XP_002173723.1	peroxiredoxin DO15	Schizosaccharomyces japonicus yFS275				LRKIQIDlaypkantpctkqggGVSYDacknktkqn
		212001770.gb	EEB07430.1	peroxiredoxin DO15	Schizosaccharomyces japonicus yFS275				
1079	5.80E-11	194556835.ref	YP_002091881.1	alkyl hydroperoxide reductase	Burkholderia cenocepacia PC184				YFYPAAFTKGCTTEAfgvsadLTKFSVSECRlpaldira
		124870626.gb	EAY762342.1	alkyl hydroperoxide reductase	Burkholderia cenocepacia PC184				
1080	3.07E-10	91762061.ref	ZP_01284026.1	bacterioferritin comigratory protein	Candidatus Pelagibacter ubique HTCC1002				IDGELYSyvykddfpqgclainGISKDSlnhkkkafk
		91717863.gb	EAS84513.1	bacterioferritin comigratory protein	Candidatus Pelagibacter ubique HTCC1002				
1081	4.75E-11	774575999.ref	YP_347701.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas fluorescens Pf0-1				SLSALKGGQVlypkddtpgctkqccGVSDshkkkvtkfk
		77381599.gb	ABA73112.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Pseudomonas fluorescens Pf0-1				
1082	4.81E-10	70728834.ref	YP_2568563.1	AhpC/TSA family protein	Pseudomonas fluorescens Pf-5				YFYPKDDTTPGCTTEGGQgvsrdKLLKLYGKEYkdglvq
		68343133.gb	AA790739.1	AhpC/TSA family protein	Pseudomonas fluorescens Pf-5				
1083	4.03E-19	85544451.pdb	2CX3	A Chain A, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K1				IFFPAAAFSPVCTKELCaisvdGLKKFKDENRlqkiva
		85544452.pdb	2CX3	B Chain B, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K2				
		85544453.pdb	2CX3	C Chain C, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K3				
		85544454.pdb	2CX3	D Chain D, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K4				
		85544455.pdb	2CX4	A Chain A, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K5				
		85544456.pdb	2CX4	B Chain B, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K6				
		85544457.pdb	2CX4	C Chain C, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K7				
		85544458.pdb	2CX4	D Chain D, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K8				
		85544459.pdb	2CX4	E Chain E, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K9				
		85544460.pdb	2CX4	F Chain F, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K10				
		85544461.pdb	2CX4	G Chain G, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K11				
		85544462.pdb	2CX4	H Chain H, Crystall Structure Of A Bacterioferritin Comigratory Protein	Aeropyrum Permx K12				
1084	0	186458539.ref	ZP_02968847.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	bacterium Ellin514				TNGGGRlylypkddtpgctkqccGVSDshkkkvtkfk
		184204777.gb	EDU01828.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	bacterium Ellin514				
1085	2.48E-11	157907381.ref	NP_280562.1	HvYA	Halobacterium sp. NRC-1				GWGSERLIlypdlfslpvcateicGISPDatheatadeya
		10581280.gb	AA630042.1	monoxygenase	Halobacterium sp. NRC-1				
1086	1.01E-11	197624629.pdb	EDY37188.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Cyanobium sp. PCC 7001				RPAAARAlypdlfslpvcateicGVSDshhseicqseq
		121727192.ref	ZP_01680359.1	bacterioferritin comigratory protein	Cyanobium sp. PCC 7001				YFYPKAMTPGCTVQACgvsdfrLGNFKFIERDNfghlri
1087	0	153213291.ref	ZP_01948703.1	bacterioferritin comigratory protein	Vibrio cholerae V52				
		153801654.ref	ZP_01956240.1	bacterioferritin comigratory protein	Vibrio cholerae MZO-3				
		153825560.ref	ZP_01978227.1	bacterioferritin comigratory protein	Vibrio cholerae MZO-2				
		153828623.ref	ZP_01981290.1	bacterioferritin comigratory protein	Vibrio cholerae 623-39				
		197751298.ref	YP_002174709.1	bacterioferritin comigratory protein	Vibrio cholerae AM-19226				
		121630437.gb	EAX62830.1	bacterioferritin comigratory protein	Vibrio cholerae V52				
		124116091.ref	EAT34911.1	bacterioferritin comigratory protein	Vibrio cholerae V587				
		124122831.gb	EY41574.1	bacterioferritin comigratory protein	Vibrio cholerae MZO-3				
		125620563.gb	EAZ48949.1	bacterioferritin comigratory protein	Vibrio cholerae V51				
		148875894.gb	EDL74029.1	bacterioferritin comigratory protein	Vibrio cholerae 623-39				
		149740711.gb	EDM54810.1	bacterioferritin comigratory protein	Vibrio cholerae MZO-2				
		150422723.gb	EDN14677.1	bacterioferritin comigratory protein	Vibrio cholerae AM-19226				
1088	0	1588315466.ref	YP_001507974.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Frankia sp. EAN1tpcc				FFYPAAAMTPGCTRESGvsadKQAEFSAKHswards

1089	4.42E-15	1512271967 ref	YP_001332789.1	ABM13068.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Frankia sp. EAM1pec			LKGGKAYVYKNDPTGCTEACGVSISGDHDMQFIEKIQ
1090	5.93E-11	450374767 dbj	BAE60327.1	BAE60327.1	bacterioferitin comigratory protein	Staphylococcus aureus subsp. aureus str. Newman			FFYPKDDTPGCTSESQGISRSHDKFRGKYDVGILRS
1091	1.89E-11	30180371 emb	CAD84683.1	CAD84683.1	bacterioferitin comigratory protein	Nitrosomonas europaea ATCC 19718			TLSAQYVYKNDPTGCTEACGVSISGDHDMQFIEKIQ
1092	6.84E-11	214044200 gb	EEB84838.1	AB841380.2	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Thiomicrospira crunogena XCL-2			YFYPRDDTPGCTKEISGISRDKHDKFKTAKHDSMGLERA
1093	9.95E-14	88002278 ref	YP_5065599.1	YP_5065599.1	redoxin	Rhizobium lotum strain 102			SLQDFLQKAGYVYKNDPTGCTEACGVSISGDHDMQFIEKIQ
1094	0	869628606 gb	ABD046915.1	YP_001702255.1	bacterioferitin comigratory protein	Neorickettsia sennetsu str. Miyayama			YFYPAAMTPGCTKQACGVSISGDHDMQFIEKIQ
1095	0	1673395 emb	CA804798.1	CA804798.1	hypothetical 9.1 kd protein	Mycobacterium abscessus			ELKGDKISYKQVYVYKNDPTGCTEACGVSISGDHDMQFIEKIQ
1096	0	147674356 ref	YP_001217679.1	YP_001217679.1	thioredoxin-dependent thiol peroxidase	Bacillus subtilis			YFYPKAMTPGCTVQACGVSISGDHDMQFIEKIQ
1097	0	146300195 ref	YP_001194786.1	YP_001194786.1	bacterioferitin comigratory protein	Vibrio cholerae O395			FFYPKASTPGCTEACGVSISGDHDMQFIEKIQ
1098	0	213629346 gb	ABO05467.1	ABO05467.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Flavobacterium johnsoniae UW101			FFYPAAMTPGCTEACGVSISGDHDMQFIEKIQ
1099	3.00E-11	171317827 ref	YP_02907008.1	YP_02907008.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Bifidobacterium longum subsp. infantis ATCC 15697			YFYPAAMTPGCTEACGVSISGDHDMQFIEKIQ
1100	1.22E-10	26987970 ref	NP_743395.1	NP_743395.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Burkholderia ambifaria MEX-5			YFYPAAMTPGCTEACGVSISGDHDMQFIEKIQ
1101	1.67E-16	116063062 dbj	BAAR1136.2	BAAR1136.2	thiol peroxidase	Aeropyrum pernix K1			IFFPAAFSVCTKELCEAISVDSCLKKFKDENRIVKPD
1102	3.58E-12	91775334 ref	YP_544946.1	YP_544946.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylobacillus flagellatus K1			YFYPKDNTTPSCTLQAGISRSDFATFRDKFKHGMKIVRS
1103	0	108760609 ref	YP_634742.1	YP_634742.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Methylobacillus flagellatus K1			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1104	0	118474406 ref	YP_891513.1	YP_891513.1	anti-oxidant AhpC/TSA family protein	Campylobacter fetus subsp. fetus 82-40			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1105	1.35E-11	116222700 ref	YP_824956.1	YP_824956.1	antioxidant. AhpC/Tsa family	Solibacter ustulatus Elin6076			LGARIAVYVYKNDPTGCTEACGVSISGDHDMQFIEKIQ
1106	0	91223520 ref	YP_01258785.1	YP_01258785.1	redoxin domain-containing protein	Redoxin domain protein			SLEDFKGGKYYVYKNDPTGCTEACGVSISGDHDMQFIEKIQ
1107	6.15E-10	162454243 ref	YP_001616610.1	YP_001616610.1	bacterioferitin comigratory protein	Vibrio alginolyticus 12G01			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1108	0	162439437 ref	YP_001826156.1	YP_001826156.1	hypothetical protein SGR_4644	Sorangium cellulosum 'So ce 56'			YFYPAALTPGCTKQACGVSISGDHDMQFIEKIQ
1109	0	178466953 dbj	BAQ21473.1	BAQ21473.1	conserved hypothetical protein	Streptomyces griseus subsp. griseus NBRC 13350			YFYPAALTPGCTKQACGVSISGDHDMQFIEKIQ
1110	0	189500619 ref	YP_001960089.1	YP_001960089.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobium phaeoacetoides BS1			YFYPKDDTPGCTEACGVSISGDHDMQFIEKIQ
1111	5.02E-10	209574008 gb	ACIE62942.1	ACIE62942.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Chlorobium phaeoacetoides BS1			YFYPKDDTPGCTEACGVSISGDHDMQFIEKIQ
1112	0	157961801 ref	YP_001501835.1	YP_001501835.1	peroxide AhpC-Tsa family protein	Acidithiobacillus thiooxidans			LNGKIWVYVYKNDPTGCTEACGVSISGDHDMQFIEKIQ
1113	0	157163950 ref	YP_001467570.1	YP_001467570.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Shewanella pealeana ATCC 700345			YFYPKASTPGCTVQACGVSISGDHDMQFIEKIQ
1114	0	112801129 gb	EAI198473.1	EAI198473.1	anti-oxidant AhpC/TSA family protein	Shewanella pealeana ATCC 700345			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1115	7.64E-13	86167790 gb	EAQ69048.1	EAQ69048.1	putative peroxide bcp (Thioredoxin reductase/Bacterioferitin comigratory protein)	Campylobacter concisus 13826			FFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1116	1.51E-09	193214342 ref	YP_001995541.1	YP_001995541.1	putative bacterioferitin comigratory protein	Synechococcus sp. RS9917			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1117	0	172058523 gb	ACF13094.1	ACF13094.1	putative bacterioferitin comigratory protein	Synechococcus sp. RS9917			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1118	1.89E-10	171991044 gb	ACB61966.1	YP_001814983.1	bacterioferitin comigratory protein	Acinetobacter sp. ADP1			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1119	0	193085388 gb	ACF10664.1	YP_001937864.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	Exiguobacterium sibiricum 255-15			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1120	4.13E-14	145256409 ref	XP_001401375.1	XP_001401375.1	PRXQ_POPJC RecName: Full=Peroxide bcp Q. chloroplast; AlNA	Chlorocaulum parvum NCIB 8327			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1121	3.75E-10	15298487 ref	YP_001349741.1	YP_001349741.1	peroxide bcp Q	Populus trichocarpa x Populus deltoides			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ
1122	6.83E-14	150959975 gb	ABR82000.1	ABR82000.1	peroxide bcp Q	Populus trichocarpa x Populus deltoides			YFYPKDNTTPGCTEACGVSISGDHDMQFIEKIQ

1123	7.23E-17	118046201	ref	ZP_01514854.1	Redoxin		Chloroflexus aggregans DSM 9485	YFYPKDDTTPGCTSQACgspdxSHTKFKTKHNymgIirs
		117997366	gb	EAV11554.1	Redoxin		Chloroflexus aggregans DSM 9485	
		219543203	gb	ACL24941.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Chloroflexus aggregans DSM 9485	
1124	0	209363960	ref	YP_001424466.2	thioredoxin peroxidase		Coxiella burnetii Dugway 5J108-111	LKGKKVlyfypkddlpgcckeaGISKDahqsfkqkyn
		212219469	ref	YP_002305256.1	thioredoxin peroxidase		Coxiella burnetii CbuK_Q154	
		207081893	gb	ABS78051.2	thioredoxin peroxidase		Coxiella burnetii Dugway 5J108-111	
		212012731	gb	ACJ20111.1	thioredoxin peroxidase		Coxiella burnetii CbuK_Q154	
1125	6.32E-15	149187306	ref	ZP_01865604.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	LOGKKVLlyfyraspgcvtvaqGLSPDKlnlnfkqe
		149188977	ref	ZP_01867266.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	
		149189172	ref	ZP_01867400.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	
		149190279	ref	ZP_01868553.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	
		148835886	gb	EDL52849.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	
		148837075	gb	EDL54024.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	
		148837163	gb	EDL54111.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	
		148838842	gb	EDL55781.1	bacterioferritin comigratory protein		Vibrio shilonii AK1	
1126	0	14600604	ref	NP_14712.1	truncated thiol peroxidase		Aeropyrum permix K1	GRSVVyhpkalfpgcraeiPPGRNRRAfksfvgaaq
		5103930	dbj	BAA79246.1	truncated thiol peroxidase		Aeropyrum permix K1	
1127	0	215919074	ref	NP_819971.2	antioxidant, AhpC/TSA family		Coxiella burnetii RSA 493	LKGKKVlyfypkddlpgcckeaGISKDahqsfkqkyn
		206583959	gb	AAQ910485.2	thioredoxin peroxidase		Coxiella burnetii RSA 493	
1128	4.25E-09	71907981	ref	YP_285568.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Dechloromonas aromatica RCB	FSLPDIffypkdgtpcctkevllLGISRDkhaefrdkeg
		71847602	gb	AAZ47098.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen		Dechloromonas aromatica RCB	
1129	0	188569826	ref	YP_001922441.1	putative peroxiredoxin bcp		Clostridium botulinum E3 str. Alaska E43	YFYPKDNTPGCTTEACglskdsHhNKfISKFNvlgiers
		188500107	gb	ACD53243.1	putative peroxiredoxin bcp		Clostridium botulinum E3 str. Alaska E43	
1130	0	300187231	ref	NP_830354.1	thioredoxin-dependent thiol peroxidase		Bacillus cereus ATCC 14579	YFYPKDMTPGCTTEACgyspdRHLKfIEKHvymgiers
		29894284	gb	AAI07565.1	thioredoxin-dependent thiol peroxidase		Bacillus cereus ATCC 14579	

Total Number of Results: 1130

Hit #	p-value	gi number	db	protein accession	Name	Species	Crosshits [subfamily (p-value)]	AhpC/Prx1 subgroup	Active Site Signature
1		67159414	ref	ZP_00419975.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Azotobacter vinelandii</i> AvOP		group 2	FFYPADFTFVCPTEVSTTHKAWHDSSESGLAEREGEGLTK
2	1.72E-17	87084178	gb	EA036370.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Azotobacter vinelandii</i> AvOP		group 2	VFYPADFTFVCPTEFKAALGVSTTHKAWHDHDTSEVMITGLDRG
3		125714691	gb	ABN53183.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Clostridium thermocoelum</i> ATCC 27405		group 2	FFYPADFTFVCPTEVSTTHKAWHSSSEEGADRAAEGIGVKG
		16759365	ref	NP_451184.1	Alkyl hydroperoxide reductase subunit C	<i>Salmonella typhimurium</i> LT2			
		29142680	ref	NP_806002.1	Alkyl hydroperoxide reductase subunit C	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhi str. CT18			
		56414255	ref	YP_151330.1	Alkyl hydroperoxide reductase subunit C	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhi Ty2			
		62179209	ref	YP_2156626.1	Alkyl hydroperoxide reductase subunit C	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Choleraesuis str. SC-B67			
		161504221	ref	YP_001571333.1	hypothetical protein SARI_02928	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Paratyphi A str. ATCC 9150			
		161615186	ref	YP_001569151.1	hypothetical protein SPAB_02954	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Paratyphi B str. SPB7			
		61218500	sp	P0A251	AHP_C	<i>Salmonella typhimurium</i> LT2			
		61218501	sp	P0A252	AHP_C	<i>Salmonella typhi</i>			
		25285290	pir	gi	AB0577	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhi (strain CT18)			
		4571171	gb	AAA16431.1	Alkyl hydroperoxide reductase	<i>Salmonella typhimurium</i>			
		16419119	gb	AAL19559.1	Alkyl hydroperoxide reductase, C22 subunit	<i>Salmonella typhimurium</i> LT2			
		16501859	emb	CAD05084.1	Alkyl hydroperoxide reductase c22 protein	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhi			
		29138291	gb	AAO98662.1	Alkyl hydroperoxide reductase c22 protein	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhi Ty2			
		56128512	gb	AAV78018.1	Alkyl hydroperoxide reductase c22 protein	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Paratyphi A str. ATCC 9150			
		62126842	ref	AAAG4545.1	Alkyl hydroperoxide reductase, C22 subunit; detoxification	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Choleraesuis str. SC-B67			
		160365688	gb	ABX22191.1	hypothetical protein SARI_02328	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar 62:z4:z23:--			
		161364550	gb	ABX68316.1	hypothetical protein SPAB_02954	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Paratyphi B str. SPB7			
4		51829204	ref	YP_074755.1	2-cys peroxiredoxin	<i>Symbiobacterium thermophilum</i> IAM_14863		group 1	FFYPADFTFVCPTEVSVSHRAWIKTPKEGGGLGVLEIGVALRG
		51855753	tbl	BAD39911.1	2-cys peroxiredoxin	<i>Symbiobacterium thermophilum</i> IAM_14863			
5		145621190	tbl	ZP_01777180.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Geobacter bemiidensis</i> Bem		group 1	VTKFFYPLDFTFVCPSEVSVTHLAWKNTSVNGGIGESVALRG
		144942508	gb	EDJ77643.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Geobacter bemiidensis</i> Bem			
6		126664476	ref	ZP_01735460.1	Alkyl hydroperoxide reductase c22 protein	<i>Mairrobacter</i> sp. ELB17		group 2	FFYPADFTFVCPTEVSTTHKAWHDSSESQGLADRAAEGVGVKG
		126630802	gb	ERA01416.1	Alkyl hydroperoxide reductase c22 protein	<i>Mairrobacter</i> sp. ELB17			
7		145350122	tbl	XP_001419466.1	predicted protein	<i>Ostreococcus lucimarinus</i> CCE5901		group 1	FFYPLDFTFVCPTEVLGVDSHSLAWLQTDRRDGGGLDGTALRG
		144579698	gb	ABO97759.1	predicted protein	<i>Ostreococcus lucimarinus</i> CCE5901			
8		120556743	ref	YP_961094.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Marinobacter aquaeolei</i> V78		group 2	FFYPADFTFVCPTEVSTTHKAWHDHDTSEQGLADRAAEGVGVKG
		120326592	gb	ABM20907.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Marinobacter aquaeolei</i> V78			
9		30749577	tbl	INBJ	A Chain A, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>		group 2	FFYPADFTFVSPTEVSTTHKAWHSSSEEGADRAAEGVGVKG
		30749578	tbl	INBJ	B Chain B, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749579	tbl	INBJ	C Chain C, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749580	tbl	INBJ	D Chain D, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749581	tbl	INBJ	E Chain E, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749582	tbl	INBJ	F Chain F, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749583	tbl	INBJ	G Chain G, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749584	tbl	INBJ	H Chain H, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749585	tbl	INBJ	I Chain I, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749586	tbl	INBJ	J Chain J, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749587	tbl	INBJ	K Chain K, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749588	tbl	INBJ	L Chain L, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749589	tbl	INBJ	M Chain M, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749590	tbl	INBJ	N Chain N, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749591	tbl	INBJ	O Chain O, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749592	tbl	INBJ	P Chain P, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749593	tbl	INBJ	Q Chain Q, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749594	tbl	INBJ	R Chain R, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749595	tbl	INBJ	S Chain S, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
		30749596	tbl	INBJ	T Chain T, Crystall Structure Of Ahpc With Active Site	<i>Salmonella typhimurium</i>			
10		83592754	ref	YP_426506.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Rhodospirillum rubrum</i> ATCC 11170		group 2	FFYPADFTFVCPTEVSTAHKAWHDHDTSEVLIALADRAGAGIG
		83575668	gb	ABC2219.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Rhodospirillum rubrum</i> ATCC 11170			
11	1.24E-13	68171710	ref	ZP_00545066.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Enrichia chaffeensis</i> str. Sapulpa		group 1	NLKFYPRDFTFVCPTEISTCHSHWRNSIKGGIDNSIALRA
		86658172	ref	YP_507536.1	antioxidant, AhpC/Tsa family	<i>Enrichia chaffeensis</i> str. Arkansas			
		67998666	tbl	EA0M55662.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Enrichia chaffeensis</i> str. Sapulpa			
		88599629	tbl	ABD45098.1	antioxidant, AhpC/Tsa family	<i>Enrichia chaffeensis</i> str. Arkansas			
12		104781414	ref	YP_607912.1	Alkyl hydroperoxide reductase, C22 subunit, thioredoxin	<i>Pseudomonas entomophila</i> L48		group 2	FFYPADFTFVCPTEVSTTHKAWHDHDTSDVLIAGLADRGGGGV
		95110401	emb	CAK15109.1	Alkyl hydroperoxide reductase, C22 subunit, thioredoxin	<i>Pseudomonas entomophila</i> L48			
13	2.79E-17	124267282	ref	YP_01021286.1	Alkyl hydroperoxide reductase protein	<i>Methylobium petroaleophilum</i> PM1		group 2	VFYPADFTFVCPTEISTAHKAWHDHDTSDVLIAGLDRGNGIG
		124260057	tbl	ABM95051.1	Alkyl hydroperoxide reductase protein	<i>Methylobium petroaleophilum</i> PM1			
14		145627042	tbl	ZP_01777045.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Geobacter bemiidensis</i> Bem		group 1	TLLAALAINIKKFYFPMDFTFVCPTERGDLDGVALRARSV
		144942660	tbl	EDJ7782.1	Alkyl hydroperoxide reductase [Thiol specific antioxidant]	<i>Geobacter bemiidensis</i> Bem			
15	2.92E-14	147919357	ref	YP_686907.1	2-cysteine peroxiredoxin	uncultured methanogenic archaeon RC-1		group 2	SGTIAPLKVFPADFTYVCPKEFSVHWKAWHNSITPDGLSYRA
		110622303	emb	CAJ3758.1	2-cysteine peroxiredoxin	uncultured methanogenic archaeon RC-1			
16		148244267	tbl	YP_001218961.1	peroxiredoxin	<i>Candidatus Vesicomycosoccus okutanii</i> HA		group 1	VLVFFYPLDFTFVCPSEVSVTHNAWKIDPDGGLGTGVALRA
		146326094	tbl	BAF61237.1	peroxiredoxin	<i>Candidatus Vesicomycosoccus okutanii</i> HA			



17	1.16E-14	73663642	ref	YP_302423.1	putative alkyl hydroperoxide reductase subunit C	Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	group 2	NLKGFPADFSFVCPTEVSTVHKAWHDSLGLAQRGADGIG
		123761495	sp	O48U1B	AhPC_STAS1 Alkyl hydroperoxide reductase subunit	Staphylococcus saprophyticus subsp. saprophyticus ATCC 15304		
		72498157	dbj	BAE19476.1	putative alkyl hydroperoxide reductase subunit C	Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	group 1	VLVFFYPLDFTFVCPSEVSTHNAWRNTPVNGIGGGVAFRR
18		104780414	ref	YP_606912.1	peroxiredoxin (alkyl hydroperoxide reductase C)	Pseudomonas entomophila L48	group 1	VDVVFYPLDFTFVCPSESHYA WCLGQEGGGVGLVAGIALRG
		95108401	emb	CAK14101.1	putative peroxiredoxin (alkyl hydroperoxide reductase)	Pseudomonas entomophila L48	group 1	VDVVFYPLDFTFVCPSEVSHAWINTPRNGGLVLLSGLALRG
		157439234	gb	ED082442.1	Peroxiredoxin 1	giardia lamblia ATCC 50803	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
20		75070966	sp	O5REY3	PRDX3_PONPY_Thioredoxin-dependent peroxide reductase	Pongo pygmaeus	group 1	VLVFFYPLDFTFVCPSEVSTHNAWRNTPVKGIGGAGVAFRR
		55725787	emb	CAH86674.1	hypothetical protein		group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
21		91715447	ref	YP_563096.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella denitrificans OS217	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		91715447	ref	ABE55373.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella denitrificans OS217	group 2	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
22		16121148	ref	NP_421712.1	alkyl hydroperoxide reductase, subunit c	Caulobacter crescentus CB15	group 2	VLLFFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		13424540	gb	AAK2480.1	alkyl hydroperoxide reductase, subunit c	Caulobacter crescentus CB15	group 1	VLLFFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
23		55742316	ref	NP_001006812	peroxiredoxin 4	Xenopus tropicalis	group 1	VLLFFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		49698976	gb	AAH76892.1	Peroxiredoxin 4	Xenopus tropicalis		
		89269080	emb	CAJ83798.1	peroxiredoxin 4	Xenopus tropicalis		
24		16081313	ref	NP_393630.1	probable peroxiredoxin	Thermoplasma acidophilum DSM 1728	group 1	VNGQIKKRVLRFFYPADFTFVCPTEVSTVSKGTATGNARQGVLE
		10639297	emb	CAC11299.1	probable peroxiredoxin	Thermoplasma acidophilum		
25	6.67E-11	165966373	gb	EDR23602.1	hypothetical protein, conserved	Entamoeba dispar SAW760	outlier	KAQIGLFLYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		90086421	dbj	BAE91763.1	unannoted protein product	Mycaca fascicularis	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
27		148234128	ref	NP_001088817	hypothetical protein LOC496089	Xenopus laevis	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		56269242	gb	AAH87512.1	LOC496089 protein	Xenopus laevis	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
28		4380669	emb	CAA80269.1	thiol-specific antioxidant protein	Homo sapiens	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
29		124809308	ref	XP_001348542	2-Cys peroxiredoxin	Plasmodium falciparum 3D7	group 1	YFYPDLDFVCPSECVTHLAWNTKPLKGGIGDSVSLRAVLI
		7677316	gb	AAE67110.1	AF225977_1 thioredoxin peroxidase 1	Plasmodium falciparum		
		10780978	gb	AAG14354.1	AF294426_1 2-Cys peroxiredoxin	Plasmodium falciparum		
		23497438	dbj	BAAN36981.1	AE014822_16 2-Cys peroxiredoxin	Plasmodium falciparum 3D7		
30		82539442	ref	XP_724109.1	2-Cys peroxiredoxin	Plasmodium falciparum	group 1	YFYPDLDFVCPSECVTHLAWNTKPLKGGIGDSVSLRAVLI
		23478642	gb	EAA15674.1	thioredoxin peroxidase 1	Plasmodium yoelii yoelii str. 17XNL		
		28201169	dbj	BAC56717.1	2-Cys peroxiredoxin	Plasmodium yoelii		
31		23394396	gb	AAN314487.1	thioredoxin peroxidase	Phytophthora infestans		
32		164841700	gb	EDR05859.1	2-systeine peroxiredoxin	Laccaria bicolor S238N-H82	group 1	VLTFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
33		38515000	gb	AACT72300.1	trypanoxin peroxidase	Citrichidia fasciculata	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
34		117618902	ref	YP_856052.1	alkyl hydroperoxide reductase 1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	group 1	VLVFFYPLDFTFVCPSEVSHNAWRNTPVKGIGGAGVAFRR
		1176560309	gb	ABK37957.1	alkyl hydroperoxide reductase 1	Aeromonas hydrophila subsp. hydrophila ATCC 7966		
35		27904673	ref	NP_777799.1	peroxiredoxin 2	Buchnera aphidicola str. Bp (Baizongia pistaciae)	group 1	VLVFFYPLDFTFVCPSEVSHNAWRNTPVKGIGGAGVAFRR
		38606261	sp	O89AS1	TSAA_BUCBP Probable peroxiredoxin (Thioredoxin dependent)	Buchnera aphidicola str. Bp (Baizongia pistaciae)		
		27904070	gb	AAO26904.1	peroxiredoxin 2	Taenia solium	group 1	FFYPLDFTFVCPTECVSTHNAWRNTPVKGIGGAGVAFRR
36		158519654	gb	AAV91322.2	2-Cys peroxiredoxin	Homo sapiens	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
37		14250063	dbj	AAH08435.1	Peroxiredoxin 3	Mus musculus	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
38		12846314	dbj	BAE27120.1	unannoted protein product	Beggiatoa sp. PS	group 1	VLVFFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
39		153875270	ref	YP_02003146.1	antioxidant, AhpC/Tsa family protein	Beggiatoa sp. PS	group 1	VLVFFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		152068267	gb	EDN66855.1	antioxidant, AhpC/Tsa family protein	Taenionotus camphoratus		
40		42540580	gb	AA519193.1	thioredoxin peroxidase	Candidatus Ruthia magnifica str. Cm (Calyptogenia magnifica)	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
41		118602152	ref	YP_903367.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Candidatus Ruthia magnifica str. Cm (Calyptogenia magnifica)	group 1	NLKFYPLDFTFVCPSEVSHNAWRNTPVKGIGGAGVAFRR
		1185667091	dbj	ABL01896.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Candidatus Ruthia magnifica str. Cm (Calyptogenia magnifica)		
42		77979422	ref	YP_00834844.1	COG5450: Peroxiredoxin	Ferula intermedia ATCC 29609	group 1	VLNLKFFWPMDFVCPSEVSHNAWRNTPVKGIGGAGVAFRR
43		149689642	ref	XP_001493688.1	PREDICTED: similar to antioxidant protein isoform 2	Equus caballus	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
44		380519855	gb	AAH60567.1	Prdx3 protein	Rattus norvegicus	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
45		115526502	ref	YP_783413.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Rhodopseudomonas palustris BisA53	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		115520449	gb	ABJ08433.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Rhodopseudomonas palustris BisA53	group 3	MLGIGYGVFPKDFVCPTEVTEVGLGKAWRRDHHKAGVATRY
46		57095572	ref	XP_532386.1	PREDICTED: similar to peroxiredoxin 1 isoform 1	Canis familiaris	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
47	3.60E-18	91776893	ref	YP_554101.1	AhpC	Burkholderia xenovorans LB400	group 2	VFYPADFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		91691553	gb	ABE34751.1	alkyl hydroperoxide reductase protein	Burkholderia xenovorans LB400	group 1	VGKFFYPLDFTFVCPSEVSTHNAWRNTPVKGIGGAGVAFRR
48		94499181	ref	YP_01305719.1	antioxidant, AhpC/Tsa family protein	Oceanobacter sp. RED65	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		94428813	gb	EAT13785.1	antioxidant, AhpC/Tsa family protein	Oceanobacter sp. RED65	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
49		81914708	sp	O8K3U7	PRDX2_CRIGR Peroxiredoxin-2	Cricetulus griseus	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
		22324906	gb	AAH56573.1	peroxiredoxin 2	Cricetulus griseus	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR
50	1.87E-18	21357347	ref	NP_648759.1	CG6888 CG6888-PA, isoform A	Drosophila melanogaster	group 1	VFYPADFTFVCPTECVTHCAWNTPRNGGLGNMKTGLALRA
		7294303	gb	AAF49652.1	CG6888-PA	Drosophila melanogaster		
		19527931	gb	AAL90080.1	AT16346P	Drosophila melanogaster		
51	4.55E-16	86132176	ref	YP_01050771.1	putative thioredoxin peroxidase	Cellulopaga sp. MED134	group 4	FWYPKDFVCPTEGTEGTVHFALWNTAKNGIEVLDVNTVYRA
		85817095	gb	EAQ38278.1	putative thioredoxin peroxidase	Dokdonia donghaiensis MED134		
52		94676828	ref	YP_589022.1	antioxidant, AhpC/Tsa family	Baumannia cicadellinicola str. Hc (Homalodisca coagulata)	group 1	VLVFFWPMDFVCPSEVSHNAWRNTPVKGIGGAGVAFRR
		942119976	gb	ABF14135.1	antioxidant, AhpC/Tsa family	Baumannia cicadellinicola str. Hc (Homalodisca coagulata)	group 2	IFMPAAF1FNCPTESHKVVHHTSDVQKGEGLALRGEVAVKVS
53	5.39E-11	118054286	ref	YP_01522826.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Comamonas testosteroni KF-1	group 2	MLGIGYGVFPKDFVCPTEVTEVGLGKAWRRDHHKAGVATRY
		117938485	gb	EAV12649.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Comamonas testosteroni KF-1	group 3	MLGIGYGVFPKDFVCPTEVTEVGLGKAWRRDHHKAGVATRY
54	2.12E-12	163702225	ref	YP_02121068.1	AhpC, alkyl hydroperoxide reductase C	Methylobacterium nodulans ORS 2060	group 3	MLGIGYGVFPKDFVCPTEVTEVGLGKAWRRDHHKAGVATRY
		162431562	gb	EDQ42163.1	AhpC, alkyl hydroperoxide reductase C	Methylobacterium nodulans ORS 2060		
55		73998673	ref	XP_865127.1	PREDICTED: similar to Thioredoxin-dependent perox	Canis familiaris	group 1	FFYPLDFTFVCPTEVSTHNAWRNTPVKGIGGAGVAFRR

56	0	55824562.gb	AAV66401.1	peroxidoxin 1	<i>Macaca fascicularis</i>		group 1	FFYPLDFTFVCPTEVSDSCHLAWINPKQGG.LVLEKIGSIFRG
57	0	114633019.ref	XP_001154135.1	PREDICTED: peroxidoxin_3 isoform 2	<i>Pan troglodytes</i>		group 1	FFYPLDFTFVCPTEVSVSHLAWINTPRNGGLVLLSGLALRG
58	0	56416176.ref	YP_156957.1	Peroxidoxin, AhpC/Tsa family	<i>Idiomarina licheniis L2TR</i>		group 3	FFYPKDFTFVCPTEVMGVKLAWRREHPENVALRAVSNRALG
59	0	561780686.gb	AAV83408.1	Peroxidoxin, AhpC/Tsa family	<i>Idiomarina licheniis L2TR</i>		group 1	FFWPKDFTFVCPTEVSVHFHWKNTFVKGGIGEAIALRGNMK
60	0	54301401.gb	AAV33155.1	alkyl hydroperoxide reductase	<i>Helicobacter pylori</i>		group 1	FFYPADFTFVCPTEVSVTHKAWWQYDEKGIATGNAGRGVLE
61	0	13541053.ref	NP_110741.1	Peroxidoxin	<i>Thermoplasma volcanium GSS1</i>		group 1	NLKFYPLNFTFVCPTEVSVCHKAWKL.TPKYKGGIGAVAVRA
62	0	14324437.dbi	BAE59365.1	thioredoxin peroxidase	<i>Orientia tsutsugamushi Boryong</i>		group 1	FFYPLDFTFVCPTEVSHLAWINPRQGGVLDVSDGVPFRGRSV
63	5.15E-16	152992873.ref	XP_001358594.1	PREDICTED: similar to 2-Cys thioredoxin peroxidase	<i>Orientia tsutsugamushi Boryong</i>		group 1	STLVMRKTFCECFYADFTFVCPTEVSTVTKLKTIGEVALRG
64	7.03E-22	123382138.ref	XP_001298652.1	peroxidoxin, AhpC/Tsa family	<i>Sulfurovum sp. NBC37-1</i>		group 1	FAWPLDFTFVCPTEVLDVSDTHLAWINPRDGGIGAGHDLRG
65	0	119446861.ref	YP_01611684.1	hyparedoxin peroxidase, putative	<i>Trichomonas vaginalis G3</i>		group 2	VLGFFYPADFTFVCPTEVSTTHKAWHDTSDDDGLARGLDGLIG
66	0	11847688.gb	EAW28934.1	tryparedoxin peroxidase, putative	<i>Trichomonas vaginalis G3</i>		group 3	LLTIGFFWPKDFTFVCPTEVLDVSDTHKAWHDTSDVADRAVSV
67	0	4388655.emb	CAA06923.1	alkyl hydroperoxide reductase subunit C	<i>Alteromonadates bacterium TM-7</i>		group 1	LFYPMDFTFVCPTEVSDSCHLAWINPRKGGVLSQGISLRG
68	0	26989162.ref	NP_744587.1	alkyl hydroperoxide reductase	<i>Alteromonadates bacterium TM-7</i>		group 2	FFYPADFTFVCPTEVSTTHKAWHDTSDVLIAGLADRGDGGVVG
69	1.00E-09	118411034.ref	YP_874429.1	alkyl hydroperoxide reductase, C subunit	<i>Pseudomonas putida KT2440</i>		outlier	YVKIFYPSNFTAVSPTSEVSHLQFLLSKRRGGLEDGFSLPG
70	1.37E-14	153953000.ref	YP_001393765.1	alkyl hydroperoxide reductase, C subunit	<i>Pseudomonas putida F1</i>		group 2	CFYPADFSFVCPTEVSTTHKAWHDSQVLIQGLNLRGAGSNG
71	0	146345881.gb	EDK32417.1	alkyl hydroperoxide reductase, C subunit	<i>Pseudomonas putida GB-1</i>		group 1	VLVFFYPLDFTFVCPSEVSTHNAWRNTAIDGGIGAGAVAFRG
72	1.64E-18	53721528.ref	YP_110513.1	alkyl hydroperoxide reductase, C subunit	<i>Pseudomonas putida F1</i>		group 2	VFYPADFTFVCPTEVSTTHKAWHDTSDVLIQGLALRGGEIK
73	0	999119019.ref	YP_013197000.1	alkyl hydroperoxide reductase, C subunit	<i>Phaeoaculum tricornutum</i>		group 2	
74	1.26E-11	165903070.gb	EDR26707.1	alkyl hydroperoxide reductase, C subunit	<i>Clostridium kluyveri DSM 555</i>		group 1	
75	1.95E-11	164563475.ref	ED_064402.1	alkyl hydroperoxide reductase, C subunit	<i>Clostridium kluyveri DSM 555</i>		outlier	
76	0	4403306.gb	AAAS40464.1	enhancer protein	<i>Entamoeba dispar SAW760</i>		group 1	
77	1.07E-16	152974156.ref	YP_001737367.3	peroxidoxin	<i>Rickettsia canadensis str. McKiel</i>		group 2	VGKFFYPLDFTFVCPSEVSVSHLAWKNTPHKGGGLDGVVALRG
78	1.17E-14	160947446.ref	ZP_02094613.1	hypothetical protein PEPMIC_01380	<i>Bacillus cereus subsp. cytotoxic NVH 391-98</i>		group 2	KAQIGLYPLDWTFCVCPTESEVAGLVGDSVHQAWCEADK
79	0	158446680.gb	EDP23575.1	hypothetical protein PEPMIC_01380	<i>Bacillus cereus subsp. cytotoxic NVH 391-98</i>		group 2	IFMPAAFTNCPTEVSHKAWHDTSPVYKGFVAGLALRGEVVK
80	0	159030269.emb	CAU91164.1	unannotated protein product	<i>Peptostreptococcus micros ATCC 33270</i>		group 1	
81	0	109003875.ref	XP_001102188.1	PREDICTED: similar to peroxidoxin 1 isoform 2	<i>Peptostreptococcus micros ATCC 33270</i>		group 1	FFYPLDFTFVCPTEVSDSCHLAWINPKQGGVLEKIGSIFRG
				109003878.ref	<i>Vibrio Harvey HY01</i>		group 1	
					<i>Vibrio Harvey ATCC BAA-1116</i>		group 1	
					<i>Vibrio Harvey ATCC BAA-1116</i>		group 1	
					<i>Microcystis aeruginosa FCC 7806</i>		group 1	
					<i>Macaca mulatta</i>		group 1	
					<i>Macaca mulatta</i>		group 1	

109003881	ref	XP_001102380.1	PREDICTED: similar to peroxiredoxin 1 isoform 4	Macaca mulatta					
109003884	ref	XP_001102473.1	PREDICTED: similar to peroxiredoxin 1 isoform 5	Macaca mulatta					
109003888	ref	XP_001102571.1	PREDICTED: similar to peroxiredoxin 1 isoform 6	Macaca mulatta					
109003891	ref	XP_001102655.1	PREDICTED: similar to peroxiredoxin 1 isoform 7	Macaca mulatta					
109003894	ref	XP_001102742.1	PREDICTED: similar to peroxiredoxin 1 isoform 8	Macaca mulatta					
82	0	871199734.gb	NP_5749691.1 alkyl hydroperoxide reductase/Thiol specific antioxidant	Novosphingobium aromaticorans DSM 12444	group 2				VGFFYPADFTFVCPTEIQLQGLVSTSHKAWHDSHPVGLADRG
83	0	87135415.gb	ABD26157.1 alkyl hydroperoxide reductase/Thiol specific antioxidant	Raistonia eutropha JMP134	group 3				YFYPKDFTFVCPTEIENGDFAVLGVKLAWRREHKAGVALRAVS
84	5.11E-16	126663881.ref	NP_017344876.1 alkyl hydroperoxide reductase/Thiol specific antioxidant	Raistonia eutropha JMP134	group 4				VLEFWYPKDFTFVCPTECDTWFHFWLNTAKNGGIESNVTFRA
85	0	904073333.ref	EA294838.1 putative thioredoxin peroxidase	Flavobacterium bacterium BAL38	group 1				VLVFFYPLDFTFVCPSEISISHAWRNRTAIDGGIGAGVALRG
86	0	90311616.gb	EAS39745.1 putative antioxidant, AhpC/Tsa family protein	Psychromonas sp. CNPT3	group 1				FFYPLDFTFVCPTEVSVSHLAWINTPRNNGLGVLLAGIALRG
87	8.18E-17	189977094.ref	NP_578451.1 alkyl hydroperoxide reductase subunit c	Pyrococcus furiosus DSM 3638	group 2				AFYPADFTFVCPTEVSTVHKAWHDTSPESISWRKAEALKVGK
88	3.12E-10	48478594.ref	YP_024300.1 alkyl hydroperoxide reductase subunit c	Pyrococcus furiosus DSM 3638	group 2				TFYPGDFTFVCATDDSYSHKAWSDTSPAGTAQRGNDGLGLVD
89	1.13E-15	163761918.ref	ZP_02168984.1 Xenobiotic-transporting ATPase	Bacillus selenitireducens ML510	group 2				VEVCFYPADFTFVCPTEITKQWHDSDSEVLNGLADRAEGIG
90	0	54301419.gb	AAV33164.1 alkyl hydroperoxide reductase	Bacillus selenitireducens ML510	group 1				FFWPKDFTFVCPTEVSVHFAWKNTPYKGGIGEALRGNMK
91	0	160935379.ref	RF_ZP_02082761.1 hypothetical protein CLOBOL_00274	Helicobacter pylori	group 2				VLGFFYPADFTFVCPTEVSOVHKAWHDASRTGSLADGMAERG
92	0	126660237.ref	ZP_01731353.1 alkyl hydroperoxide reductase/Thiol specific antioxidant	Clostridium bolleae ATCC BAA-613	group 1				FFYPLDFTFVCPTEVSVHLAWIQTPREGGVGLVDSGVALRG
93	0	125650289.ref	XP_001335888.1 PREDICTED: hypothetical protein	Danio rerio	group 1				AGNAHIGPDTAKAMPFGDVRFPYLPDFTFVCPTECEVDS
94	0	332440428.ref	NP_875370.1 Peroxiredoxin, AhpC/TSA family	Prochlorococcus marinus subsp. marinus str. COMP1375	group 1				FFYPLDFTFVCPTEVSVCHLAWIQTPRRGGIYVNDGEADR
95	0	145631197.ref	ZP_01786897.1 single-strand DNA-binding protein	Haemophilus influenzae 22-4-21	group 1				VLVFFYPLDFTFVCPSEVSIHAWRNTPNNGIGAGVALRA
96	1.15E-16	300185859.ref	NP_830216.1 alkyl hydroperoxide reductase C22	Haemophilus influenzae R3021	group 2				CFYPADFTFVCPTEVSTTHKAWHDSSEVLMIEGLAARGADGIG
97	1.65E-16	158967.gb	AAA29110.1 peripheral membrane protein	Bacillus cereus G9241	group 1				ADKRNELSNVMLFYPLDWTFCVPTSEVSVKGGVAGIARRG
98	0	84702544.ref	ZP_01017119.1 AhpC, alkyl hydroperoxide reductase C	Parvularcula bermudensis HTCC2503	group 3				MLGIGFYPKDFTFVCPTEVLGCKLAWRRDHPHGVALRALSV
99	0	119658249.ref	ZP_01639673.1 alkyl hydroperoxide reductase/Thiol specific antioxidant	Parvularcula bermudensis HTCC2503	group 1				VLVFFYPLDFTFVCPSEVSIHAWRNTPNNGIGGGVAFRG
100	0	57241472.ref	ZP_00369418.1 AhpC/TSA family	Campylobacter lari RM2100	group 1				VLGFFYPKDFTFVCPSEVSCSHFAWKNMFPVQGGIGEAVALRG
101	0	157374987.ref	NP_001473987.1 alkyl hydroperoxide reductase/thiol specific antioxidant	Campylobacter lari RM2100	group 1				VLVFFYPLDFTFVCPSEVSIHAWRNTPVEGGIGAGVAFRG
102	3.52E-12	119877906.ref	ZP_01644880.1 alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella sediminis HAM-EB3	group 2				VSDIFMPAAFNFNCPTESHKVVHETSPVKGEGALRGEVVK
103	0	160877873.pdb	Z29S Chain A, Crystal Structure Analysis Of Rat Hbp23PE	Stenotrophomonas maltophilia R551-3	group 1				FFYPLDFTFVSPTEVDSCHLAWINTPKQGGIYVLEKIGISFRG
104	4.88E-12	146283489.ref	YP_001173642.1 alkyl hydroperoxide reductase subunit C	Rattus norvegicus	group 2				IFMPAFAFNFNCPTESHKVVHETSPVKGEGALRGEVVKVSE
105	0	555848233.gb	AAV53376.1 peroxiredoxins	Pseudomonas stutzeri A1501 Phanerochaete chrysosporium	group 1				FFYPMDFTFVCPTEVSTVSHFAWASQPRQGGIYVLDKGVALLRG

106	1.10E-16	94966480	[dbj]	BAE94183.1	peroxidoxin	<i>Geobacillus stearothermophilus</i>	group 2	CFYPADFTFVCPTEVSTTHKAWHDTSPVLDQGLAQRGADGIG
107	0	118084001	[ref]	XP_416800.2	PREDICTED: similar to MGC82793, protein isoform 2	<i>Gallus gallus</i>	group 1	ELKFFYPLDFTFVCPTECSVTHLAWINTPRQGGIQQGHALRG
108	0	1179224977	[ref]	XP_86594.1	alkyl hydroperoxidase/Thiol specific antioxidant	<i>Magnatococcus sp. MC-1</i>	group 1	VLVFFYPLDFTFVCPSECSHSLAWKNTKNGGIGDIALRG
109	0	117608733	[gb]	ABK44188.1	alkyl hydroperoxidase/Thiol specific antioxidant	<i>Magnatococcus sp. MC-1</i>	group 1	VSLFFYPMDFTFVCPTEHSLAWNTNPIEGGIVLIEGVALRG
110	4.45E-15	34580633	[ref]	NP_907868.1	peroxidoxin, putative	<i>Listeria monocytogenes EGD-e</i>	group 1	SSVLKRMFVSSCFYPADFTFVCPTEITGELGVLAEGLALRG
111	0	22298997	[ref]	NP_682244.1	thioredoxin peroxidase	<i>Listeria monocytogenes str. 1/2a F6854</i>	group 1	FFYPLDFTFVCPTEVSVSHLAWTQIDRAGGVGLTEGVALRG
112	0	13488586	[gb]	BAAC26236.1	thioredoxin peroxidase BgtPx	<i>Thermosynechococcus elongatus H36B</i>	group 1	VIKFFYPLDFTFVCPTECSVTHLAWTNVPRQGGIQLGHSLRG
113	8.99E-11	77405652	[ref]	XP_00782740.1	alkyl hydroperoxidase, subunit C	<i>Biophtalaria giabralta</i>	group 2	FCFYADFSVCPTEVSTVHKAWHDDSDVLDGLAQRGADGIG
114	0	42524877	[ref]	NP_970287.1	alkyl hydroperoxidase, subunit C	<i>Streptococcus agalactiae H36B</i>	group 1	GGGEVKKFFYPLDFTFVCPTECSVSHKRWLRDDLVLFKRGAIIRG
115	0	110800612	[ref]	XP_01388828.1	conserved hypothetical protein	<i>Bdellovibrio bacteriovorus HD100</i>	group 1	FFYPLDFTFVCPTEVGLGVDSAHLAWIKRKGDEGVAQRGQKTI
116	2.47E-19	110548651	[gb]	EA716186.1	Alkyl hydroperoxidase/Thiol specific antioxidant	<i>Geobacter sp. FCC-32</i>	group 1	NLSVSYFFWPMNFTFVCPSESHQAWRSTSTLGGIGIGVALRA
117	0	16076486	[ref]	NP_389305.1	hypothetical protein WGS1-p487	<i>Wigglesworthia gossimidia endosymbiont of Glossina brevipalpis</i>	group 1	NMKFFYPMDFTFVCPTEVSTTHLAWINTDRENGLIEGVALRG
118	0	159466035	[ref]	XP_001690737.1	peroxidoxin	<i>Bacillus subtilis subsp. subtilis str. 168</i>	group 1	VSAFFYKDFTFVCPTEHSLAWIRTPRRGGGLGVLLGVALRG
119	2.98E-14	168270361	[ref]	ED096214.1	alkyl hydroperoxidase reductase	<i>Chlamydomonas reinhardtii</i>	group 2	CFYPADFSVCPTEVSTVHKAWHDDSDVLDGLAQRGADGIG
120	0	33188454	[ref]	NP_859428.1	peroxidoxin 2 isoform c	<i>Streptococcus mutans UA159</i>	group 1	SGNARIGDGAFFKFFYPLDFTFVCPTEVGLTHLAWYEQGFSI
121	0	12656871	[gb]	AAK00633.1	AF 225212, 1 tyrosine peroxidase	<i>Homo sapiens</i>	group 1	FFYPLDFTFVCPTEVSRVLAHLQWTLQDRKGLGQGVAYRG
122	1.98E-16	75760435	[ref]	XP_00740477.1	mCG192388	<i>Mus musculus</i>	group 1	FFYPLDFTFVCPTEVSDSCHLAWINTPKGGIQLVLEKISFERG
123	0	74492064	[gb]	EA059258.1	peroxidoxin	<i>Bacillus thuringiensis serovar israelensis ATCC 35646</i>	group 2	CFYPADFTFVCPTEVSTTHKAWHDDSDVLDGLAQRGADGIG
124	0	160347104	[gb]	ABX26130.1	tyrosine peroxidase	<i>Leishmania major</i>	group 1	FFYPLDFTFVCPTECSHLQWTSVDRKGLGVLDSGVAYRG
125	0	32452624	[ref]	NP_859047.1	peroxidoxin 1	<i>Homo sapiens</i>	group 1	FFYPLDFTFVCPTEVSDSCHLAWINTPKGGIQLVLEKISFERG
126	0	32452666	[ref]	NP_859048.1	peroxidoxin 1	<i>Homo sapiens</i>		
127	0	55586231	[ref]	XP_513123.1	PREDICTED: peroxidoxin 1 isoform 6	<i>Pan troglodytes</i>		
128	0	114558242	[ref]	XP_001158454.1	PREDICTED: peroxidoxin 1 isoform 2	<i>Pan troglodytes</i>		
129	0	114558244	[ref]	XP_001156515.1	PREDICTED: peroxidoxin 1 isoform 3	<i>Pan troglodytes</i>		
130	0	114558246	[ref]	XP_001156568.1	PREDICTED: peroxidoxin 1 isoform 4	<i>Pan troglodytes</i>		
131	0	114558248	[ref]	XP_001156623.1	PREDICTED: peroxidoxin 1 isoform 5	<i>Pan troglodytes</i>		
132	0	548453	[sp]	Q08830	PRDX1_HUMAN Peroxidoxin-1 (Thioredoxin peroxidase proliferation associated gene) (pag)	<i>Homo sapiens</i>		
133	0	287641	[emb]	CAA48137.1	peroxidoxin	<i>Homo sapiens</i>		
134	0	13837907	[gb]	AAH07063.1	peroxidoxin 1	<i>Homo sapiens</i>		
135	0	18204954	[gb]	AAH21683.1	peroxidoxin 1	<i>Homo sapiens</i>		
136	0	47115241	[emb]	CAG28580.1	PRDX1	<i>Homo sapiens</i>		
137	0	54696346	[gb]	AAV38545.1	peroxidoxin 1	<i>Homo sapiens</i>		
138	0	82583658	[gb]	ABB84465.1	peroxidoxin 1	<i>Homo sapiens</i>		
139	0	119627380	[gb]	EAX06975.1	peroxidoxin 1, isoform CRA a	<i>Homo sapiens</i>		
140	0	119627381	[gb]	EAX06976.1	peroxidoxin 1, isoform CRA a	<i>Homo sapiens</i>		
141	0	119627383	[gb]	EAX06978.1	peroxidoxin 1, isoform CRA a	<i>Homo sapiens</i>		
142	0	119627384	[gb]	EAX06979.1	peroxidoxin 1, isoform CRA a	<i>Homo sapiens</i>		
143	0	119627385	[gb]	EAX06980.1	peroxidoxin 1, isoform CRA a	<i>Homo sapiens</i>		

119627386	gb	EAX06981.1	peroxidorexin 1, isoform GRA_a	Homo sapiens						
119627387	gb	EAX06982.1	peroxidorexin 1, isoform GRA_a	Homo sapiens						
123929295	gb	ABM84099.1	peroxidorexin 1	synthetic construct						
123999929	gb	ABM87471.1	peroxidorexin 1	synthetic construct						
128	0	17546365	NP_519767.1	PUTATIVE ALKYL HYDROPEROXIDE REDUCTASE	Ralstonia solanacearum GMI1000		group 3			YFYPKDFTFVCPTEVLGVKLAWRREHKAGVALRAVSNRAVG
127	0	17428662	embI_CAD15348	putative alky hydroperoxidase (subunit c) ox	Ralstonia solanacearum		group 1			FFYPLDFTFVCPTEVSHLAWVQTDRAAGLVLIQGIALRG
128	0	148242337	ref	unknown			group 1			FFYPLDFTFVCPTEVLGVDSHSLAWIQTERQGGIGEVALRG
129	3.17E-12	116511196	ref	Peroxidorexin, AhpC/TSA family	Synechococcus sp. RCC-307		group 2			VSDCFYPADFVFCPTTEVHAHVHDSVLDAGLAQRGADGIG
130	0	79489993	ref	Peroxidorexin	Lactococcus lactis subsp. cremoris SK11		group 1			VLLVSFFYPDLDFVCPTEVTHLAWINTPRQGGGLSGHTLRG
		2104955	gb	antioxidant enzyme AOE372	Mus musculus					
		12636669	tbl	unnamed protein product	Mus musculus					
		13097150	gb	Peroxidorexin 4	Mus musculus					
		18044557	gb	Peroxidorexin 4	Mus musculus					
		74138647	tbl	unnamed protein product	Mus musculus					
		74212680	tbl	unnamed protein product	Mus musculus					
131	0	46114676	ref	hypothetical protein FG03180.1	Gibberella zeae PH-1		group 1			LFYPMDFTFVCPTEVSTTHLAWWEKPRQGGGLVLIQGIALRG
132	3.42E-21	148707940	gb	mCG128264	Mus musculus		group 1			FFYPLDITFVCPTEVSVTHQAWINTSREGGLVLEKGIAYRGR
133	0	149693696	ref	PREDICTED: similar to spermogenesis specific trans	Equus caballus		group 1			FFYPLDFTFVCPTEVSDSCHLAWINTPKQGGGLVLEKGISFRG
134	2.99E-16	11192293	gb	AAG30570.1	Brassica napus		group 1			VLLFLYPLDFTFVCPTEVSVSHLAWVQTERSGGLGGIALLRG
135	0	5802974	ref	peroxidorexin 3 isoform a precursor	Homo sapiens		group 1			FFYPLDFTFVCPTEVSVSHLAWINTPRNCGGLVLLSGLALRG
		114633015	ref	PREDICTED: peroxidorexin 3 isoform 3	Pan troglodytes					
		2607171	tbl	PRDX3_HUMAN Thiooxidin-dependent peroxidase red	Homo sapiens					
		682748	tbl	Aop1 Human_MER5(Aop1 Mouse)like protein	Homo sapiens					
		12803699	tbl	peroxidorexin 3	Homo sapiens					
		13937905	tbl	peroxidorexin 3	Homo sapiens					
		16307049	tbl	peroxidorexin 3	Homo sapiens					
		18203823	tbl	peroxidorexin 3	Homo sapiens					
		18490861	tbl	peroxidorexin 3	Homo sapiens					
		37747400	tbl	peroxidorexin 3	Homo sapiens					
		47496635	tbl	PRDX3	Homo sapiens					
		54696876	tbl	peroxidorexin 3	Homo sapiens					
		61356647	tbl	peroxidorexin 3	synthetic construct					
		82583664	tbl	peroxidorexin 3	Homo sapiens					
		114205468	tbl	peroxidorexin 3	Homo sapiens					
		119569782	tbl	peroxidorexin 3, isoform GRA_b	Homo sapiens					
		119569784	tbl	peroxidorexin 3, isoform GRA_b	Homo sapiens					
136	3.98E-19	15838131	ref	subunit C of alkyl hydroperoxide reductase	Xyella fastidiosa 985c		group 2			VLKVFYPADFTFVCPTEVSTSHKAWHIDSPSGLADRGAEIG
		9706568	tbl	AE003983_1 subunit C of alkyl hydroperoxide reducta	Xyella fastidiosa 985c		group 3			MLGIVSAFFYPKDFTFVCPTEVSKLAWRRDHKEGVAIVYVLK
137	0	149125796	ref	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Methylobacterium sp. 4-46		group 2			FFYPADFTFVCPTEISTVHKAWHDTSEVMIDGMGAERGAIVG
		148517542	tbl	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Methylobacterium sp. 4-46		group 4			FFYPKDFTFVCPTECCSVTHQQWLATKKGGIEVLEKEELSFRRG
138	0	16094928	tbl	hypothetical protein CLOJ250_02478	Clostridium sp. L2-50					
		166863359	tbl	hypothetical protein CLOJ250_02478	Clostridium sp. L2-50					
139	3.40E-15	15818687	ref	Thio-specific Antioxidant (TSA) Peroxidase	Chlamydomonas reinhardtii CWT029					
		15836311	tbl	thio-specific antioxidant (TSA) peroxidase	Chlamydomonas reinhardtii J138					
		33242137	tbl	2-cys peroxidorexin BAS1 precursor	Chlamydomonas reinhardtii TW-183					
		4377087	tbl	Thio-specific Antioxidant (TSA) Peroxidase	Chlamydomonas reinhardtii CWT029					
		8979151	tbl	thio-specific antioxidant (TSA) peroxidase	Chlamydomonas reinhardtii J138					
		33236647	tbl	2-cys peroxidorexin BAS1 precursor	Chlamydomonas reinhardtii TW-183					
140	5.99E-21	123437476	ref	trypanaredoxin peroxidase, putative	Trichomonas vaginalis G3		group 1			FSYPLDFTFVCPTEVLGVDSHSLAWQNTIPREGGLGEHTLRG
		121891402	tbl	trypanaredoxin peroxidase, putative	Trichomonas vaginalis G3		group 3			KATVAVSNFFWPKDFTFVCPTEVHLAWRNQHPQVQRAVL
141	0	54295192	ref	hypothetical protein ip2272	Legionella pneumophila str. Lens		group 2			FFYPADFTFVCPTEVSTTHKAWHSTSEEGLADRGAEIGVGGK
		53755024	tbl	hypothetical protein	Legionella pneumophila str. Lens		group 1			FFYPLDFTFVCPTECCSTAHLQWTLQDRKGGGLVLAQGVAYRGR
142	0	50122862	ref	alkyl hydroperoxide reductase subunit C	Erwinia carotovora subsp. atroseptica SCRI1043		group 4			VGKFWYPKDFTFVCPTECCSVHFAWLNTAKRNGGIEDNVTYRA
		49615388	tbl	alkyl hydroperoxide reductase C22 protein	Erwinia carotovora subsp. atroseptica SCRI1043		group 2			VLGFYFPADFTFVCPTEVSCVHKAWHDANEDGMGAERGNWTFPG
143	0	145411494	tbl	cytoplasmic trypanaredoxin peroxidase	Leishmania donovani		group 1			VLGFYFPKDFTFVCPSESHFAWKNTPVQGGIGEVAVALRGVDT
144	5.53E-16	83856666	tbl	putative thioethoxin peroxidase	Crceobacter atlanticus HTCC2559		group 1			
		83850466	tbl	putative thioethoxin peroxidase	Crceobacter atlanticus HTCC2559		group 4			
145	0	23336373	tbl	COG0450: Peroxidorexin	Bifidobacterium longum DJO10A		group 2			
146	0	15791702	ref	alkyl hydroperoxide reductase	Campylobacter jejuni subsp. jejuni NCTC 11168		group 1			
		86149230	tbl	antioxidant, AhpC/Tsa family	Campylobacter jejuni subsp. jejuni CF93-6					
		86151190	tbl	antioxidant, AhpC/Tsa family	Campylobacter jejuni subsp. jejuni 260/94					
		86153707	tbl	alkyl hydroperoxide reductase	Campylobacter jejuni subsp. jejuni HB93-13					
		88697454	tbl	antioxidant, AhpC/Tsa family	Campylobacter jejuni subsp. jejuni 84-25					
		121613748	tbl	antioxidant, AhpC/Tsa family	Campylobacter jejuni subsp. jejuni 81-176					
		148926429	tbl	alkyl hydroperoxide reductase	Campylobacter jejuni subsp. jejuni CG8486					

	153951156	ref	YP_001398615.1	antioxidant, AhpC/1 sa family	Campylobacter jejuni subsp. doylei 269.97		
	157414631	ref	YP_001481887.1	alkyl hydroperoxidase reductase	Campylobacter jejuni subsp. jejuni 811.16		
	4102824	gb	AAO02323.1	alkyl hydroperoxidase reductase subunit C	Campylobacter jejuni		
	57166169	gb	AAV04966.1	antioxidant, AhpC/1 sa family	Campylobacter jejuni RM1221		
	85840588	gb	EAQ37645.1	antioxidant, AhpC/1 sa family	Campylobacter jejuni subsp. jejuni CF93-6		
	85841537	gb	EAQ38784.1	antioxidant, AhpC/1 sa family	Campylobacter jejuni subsp. jejuni 260.94		
	85842668	gb	EAQ39880.1	alkyl hydroperoxidase reductase	Campylobacter jejuni subsp. jejuni HB93-13		
	87250100	gb	EAQ73058.1	antioxidant, AhpC/1 sa family	Campylobacter jejuni subsp. jejuni 81-176		
	88190515	gb	EAQ94489.1	antioxidant, AhpC/1 sa family	Campylobacter jejuni subsp. jejuni 84-25		
	112359699	emb	CAI34485.1	alkyl hydroperoxidase reductase	Campylobacter jejuni subsp. jejuni NCTC 11188		
	145844592	gb	EDK21698.1	alkyl hydroperoxidase reductase	Campylobacter jejuni subsp. jejuni CG8486		
	152938602	gb	ABS43343.1	antioxidant, AhpC/1 sa family	Campylobacter jejuni subsp. doylei 269.97		
	157385595	gb	ABV51910.1	alkyl hydroperoxidase reductase	Campylobacter jejuni subsp. jejuni 811.16		
147	1.02E-14	165939898	gdb	EDR25705.1	hypothetical protein, conserved	Entamoeba dispar SAW760	group 1
148	0	146310803	ref	YP_001175677.1	alkyl hydroperoxidase reductase subunit C	Enterobacter sp. 638	group 2
		145317679	gb	ABP59826.1	antioxidant, AhpC/1 sa family	Enterobacter sp. 638	
149	0	15616228	ref	NP_243531.1	alkyl hydroperoxidase reductase	Bacillus halodurans C-125	group 1
		10175286	djbi	BAB06384.1	2-cys peroxidorefin	Bacillus halodurans C-125	
150	0	47499100	gb	AA128331.1	peroxidorefin	Haemophilus contortus	group 1
151	0	145515131	ref	XP_001443486.1	hypothetical protein, CSPATT00039111001	Paramacium tetraurelia strain d4-2	group 1
		124410851	emb	CAK76071.1	unnamed protein product	Paramacium tetraurelia	
152	0	118485938	gb	ABK94814.1	unknown	Populus trichocarpa	group 1
153	0	109090694	ref	XP_001097349.1	PREDICTED: peroxidorefin 3 isoform 2	Macaca mulatta	group 1
154	5.71E-15	912036333	emb	CAJ71286.1	strongly similar to peroxidorefin (thioredoxin peroxidase)	Candidatus Kueneia stultipatiensis AhpE (7.331E-09)	group 1
155	0	157960574	ref	YP_001500608.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Shewanella pealeana ATCC 700345	group 2
		157846574	gb	ABV86073.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Shewanella pealeana ATCC 700345	
156	0	114052210	ref	NP_001040464.1	thioredoxin peroxidase	Bombyx mori	group 1
		95102938	gb	ABF51440.1	thioredoxin peroxidase	Bombyx mori	
157	0	52630979	gb	AAU84951.1	thioredoxin peroxidase	Branchiostoma belcheri isingtaunense	group 1
158	0	118084003	ref	XP_001234000.1	PREDICTED: similar to MGCC82793, protein isoform 1	Gallus gallus	group 1
159	0	90425915	ref	YP_534285.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Rhodospirillum rubrum DSM 9818	group 1
		90170729	gb	ABD89966.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Rhodospirillum rubrum DSM 9818	
160	0	149185222	ref	YP_01786338.1	alkyl hydroperoxidase reductase (small subunit)	Erythrobacter sp. SD-21	group 2
		148830742	gb	EDL49177.1	alkyl hydroperoxidase reductase (small subunit)	Erythrobacter sp. SD-21	
161	7.56E-14	68473826	ref	XP_716082.1	putative thioredoxin peroxidase	Candida albicans SC5314	group 1
		13959614	sp	G9V7F0	TS-A1 CANAL Peroxidorefin TSA1 (Thioredoxin peroxidase)	Candida albicans	
		4929489	gb	AAJ34017.1	alkyl hydroperoxidase reductase	Candida albicans	
		46437733	gb	EAK97074.1	alkyl thioredoxin peroxidase	Candida albicans SC5314	
162	0	71408703	ref	XP_806739.1	trypanosoma cruzi strain CL Brener	Trypanosoma cruzi	group 1
		70870571	gb	EAN84888.1	trypanosoma cruzi	Trypanosoma cruzi	
163	0	28188631	djbi	BAC56430.1	similar to peroxidorefin 1	Bos taurus	group 1
164	0	154252753	ref	YP_001413577.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Parvabaculum lavamentivorans DS-1	group 1
		154156703	gb	ABS59320.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Parvabaculum lavamentivorans DS-1	
165	0	87203670	ref	YP_01086445.1	thioredoxin peroxidase	Synechococcus sp. WH 5701	group 1
		87281775	gb	EAQ73740.1	thioredoxin peroxidase	Synechococcus sp. WH 5701	
166	7.54E-18	32140413	gb	AAPE8994.1	thiol-specific antioxidant protein 1	Cytophobus neoflorens var. grubii	group 1
167	0	125979671	ref	XP_001363868.1	GA11781-PA	Drosophila pseudoobscura AhpE (8.878E-09)	group 1
		54640852	gb	EAL29603.1	GA11781-PA	Drosophila pseudoobscura	
168	3.20E-16	89891653	ref	YP_01203157.1	thioredoxin peroxidase	Flavobacteria bacterium BBFL7	group 4
		89516200	gb	EAS18863.1	thioredoxin peroxidase	Flavobacteria bacterium BBFL7	
169	0	163844838	ref	YP_001622493.1	hypothetical protein BSUIJS_B0694	Brucella suis ATCC 23445	group 3
		163676561	gb	ABY39671.1	hypothetical protein, conserved	Brucella suis ATCC 23445	
170	0	82238134	sp	G6DV14	PRDX1_GECJIA Peroxidorefin-1	Gekko japonicus	group 1
		49659835	gb	AA1168217.1	GENB5014P	Gekko japonicus	
		50881958	gb	AA185554.1	BS003P	Gekko japonicus	
171	0	149042395	gb	EDL96102.1	peroxidorefin 4, isoform CRA_a	Rattus norvegicus	group 1
172	0	78212854	ref	YP_381633.1	thioredoxin peroxidase	Synechococcus sp. CC9605	group 1
		78197313	gb	AB83076.1	thioredoxin peroxidase	Synechococcus sp. CC9605	
173	7.46E-18	90022452	ref	YP_528279.1	alkyl hydroperoxidase reductase, C subunit	Saccharophagus degradans 2-40	group 2
		89952052	gb	ABD82067.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Saccharophagus degradans 2-40	
174	0	21307665	gb	AAK58478.1	thiol-specific antioxidant protein	Leishmania infantum	group 1
175	0	50083688	ref	YP_045198.1	alkyl hydroperoxidase reductase protein	Acinetobacter sp. ADP1	group 2
		49529664	emb	CA567376.1	alkyl hydroperoxidase reductase, C22 subunit, thioredoxin	Acinetobacter sp. ADP1	
176	0	84362113	ref	YP_00986749.1	COG0450: Peroxidorefin	Burkholderia dolosa AU0168	group 3
		124694750	gb	EAY8650.1	Peroxidorefin	Burkholderia dolosa AU0168	
177	0	77359788	ref	YP_339363.1	peroxidorefin 2 (Thioredoxin peroxidase 1) (Thioredoxin peroxidase 2)	Pseudoalteromonas haloplanktis TAC125	group 1
		76874699	emb	CA185920.1	peroxidorefin 2 (Thioredoxin peroxidase 1) (Thioredoxin peroxidase 2)	Pseudoalteromonas haloplanktis TAC125	
178	0	163748434	ref	ED02155688.1	alkyl hydroperoxidase reductase, C subunit	Shewanella benthica KT99	group 2
		161332012	gb	ED002689.1	alkyl hydroperoxidase reductase, C subunit	Shewanella benthica KT99	
179	0	125539760	gb	EAY86175.1	hypothetical protein Os_007408	Oryza sativa (indica cultivar-group)	group 1
180	0	54507930	ref	YP_128950.1	putative antioxidant, AhpC/1sa family	Photobacterium profundum SS9	group 1

181	0	113954600	emb	CAG191483.1	putative antioxidant, AhpC/Tsa family	Photobacterium profundum SS9	group 1	FFYPLDFTFVCPTEVLGSHLAWIQARQQGGIGISTEGVALRG
182	0	113981951	gb	AB146909.1	thioredoxin peroxidase	Synechococcus sp. Cc9311	group 1	VTKFFYPDRDFTFVCPTEISTAHSHWRNTP1KGGIGGKVS1LRG
183	0	88598246	gb	ABD43716.1	antioxidant, AhpC/Tsa family	Anaplasma phagocytophilum HZ	group 1	YFYPDLDFVCPSECVTHLAWKKTPLKGGIGDSVSLRAVLI
184	0	110590544	gb	2H66	A Chain A. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
185	0	110590545	gb	2H66	B Chain B. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
186	0	110590546	gb	2H66	C Chain C. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
187	0	110590547	gb	2H66	D Chain D. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
188	0	110590548	gb	2H66	E Chain E. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
189	0	110590549	gb	2H66	F Chain F. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
190	0	110590550	gb	2H66	G Chain G. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
191	0	110590551	gb	2H66	H Chain H. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
192	0	110590562	gb	2H66	I Chain I. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
193	0	110590563	gb	2H66	J Chain J. The Crystal Structure Of Plasmodium Vivax Plasmodium vivax	Plasmodium vivax	group 1	
194	0	116688043	gb	2181	A Chain A. Crystal Structure Of Plasmodium Vivax 2-CP Plasmodium vivax	Plasmodium vivax	group 1	
195	0	116688044	gb	2181	B Chain B. Crystal Structure Of Plasmodium Vivax 2-CP Plasmodium vivax	Plasmodium vivax	group 1	
196	0	116688045	gb	2181	C Chain C. Crystal Structure Of Plasmodium Vivax 2-CP Plasmodium vivax	Plasmodium vivax	group 1	
197	0	116688046	gb	2181	D Chain D. Crystal Structure Of Plasmodium Vivax 2-CP Plasmodium vivax	Plasmodium vivax	group 1	
198	0	116688047	gb	2181	E Chain E. Crystal Structure Of Plasmodium Vivax 2-CP Plasmodium vivax	Plasmodium vivax	group 1	
199	0	113931849	ref	ZP_01417751.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Caulobacter sp. K31	group 2	FFYPADFTFVCPTEVSTAHHKAWHDTSDVMIAGLADRAGGIG
200	0	113732070	gb	EAU13138.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Caulobacter sp. K31	group 2	
201	0	83647673	ref	YP_436108.1	Peroxioredoxin	Hahella chejuensis KC1C 2336	group 1	VLVFFYPDLDFVCPSEVSIHNAWRNTPVKGGIGGGVAFRG
202	0	83635716	gb	AB_C31883.1	Peroxioredoxin	Hahella chejuensis KC1C 2336	group 1	
203	0	145846200	ref	XP_001439781.1	hypothetical protein GSPA1T00025118001	Parametium tetraurelia strain d4-2	group 1	FFYPLNFTFVCPTEVLGDGGLGISSSGLSIRG1IKPDIKSK
204	12.23E-12	124427607	emb	CAK92384.1	unnamed protein product	Parametium tetraurelia	group 1	
205	0	146306355	ref	YP_001186820.1	Peroxioredoxin	Pseudomonas mendocina ymp	group 2	IFMPAAF1FNCPTESHKVVWHETSPVKGKEGLARAGEGQKVSE
206	0	145674556	gb	AB_P84086.1	Peroxioredoxin	Pseudomonas mendocina ymp	group 2	
207	0	90022075	ref	YP_527902.1	response regulator receiver domain protein (CheY-like)	Saccharophagus degradans 2-40	group 1	VLVFFYPDLDFVCPSEVSIHNAWRNTPVEGGIGGGVAFRG
208	0	89951675	gb	ABD81690.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Saccharophagus degradans 2-40	group 1	YFYPKDFTFVCPTEVLLVKLAWRREHPAGVALRAVSVNRTYVG
209	0	115492149	emb	CAJ48673.1	alkyl hydroperoxide reductase	Bordetella avium 197N	group 3	FFYPLDFTFVCPTEVSVTHLAWINTPREGGLGVLKREGIAYRG
210	0	75070821	sp	Q5R0C63	PRDX2_PONPY Peroxioredoxin-2	Pongo pygmaeus	group 1	
211	0	55727787	emb	CAH90647.1	hypothetical protein	Pongo pygmaeus	group 1	
212	0	54696872	gb	AAV38806.1	peroxiredoxin 3	synthetic construct	group 1	FFYPLDFTFVCPTEVSVTHLAWINTPRNGGLGVLLSGLALRG
213	0	54696874	gb	AAV38809.1	peroxiredoxin 3	synthetic construct	group 1	
214	0	61366442	gb	AAAX42860.1	peroxiredoxin 3	synthetic construct	group 1	
215	0	61366450	gb	AAAX42861.1	peroxiredoxin 3	synthetic construct	group 1	
216	0	164608828	gb	ABY62745.1	thioredoxin peroxidase	Artemia franciscana	group 1	FFYPLDFTFVCPTECSTSHFVWINTPRQGGIYVAKKEGVTRFR
217	0	149589559	ref	XP_001509414.1	PREDICTED: similar to LOC496089 protein, partial	Omithorhynchus anatinus	group 1	FFYPLDFTFVCPTECVTHLAWINTPRQGGIYVAKKEGVTRFR
218	0	148747568	ref	NP_0356933.3	peroxiredoxin 2	Mus musculus	group 1	FFYPLDFTFVCPTEVSVTHLAWINTPREGGLGVLKREGIAYRG
219	0	24994689	sp	Q61171	PRDX2_MOUSE Peroxioredoxin-2 (Thioredoxin peroxidase)	Mus musculus	group 1	
220	0	1354328	gb	AA801941.1	thioredoxin peroxidase	Mus musculus	group 1	
221	0	1568575	emb	CAA97566.1	putative TSA, thiol specific antioxidant	Mus musculus	group 1	
222	0	12805153	gb	AAH02034.1	Prdx2 protein	Mus musculus	group 1	
223	0	12842613	dbl	BAB25666.1	unnamed protein product	Mus musculus	group 1	
224	0	26353250	dbl	BAC40255.1	unnamed protein product	Mus musculus	group 1	
225	0	51980699	gb	AAH61454.1	Prdx2 protein	Mus musculus	group 1	
226	0	148679031	gb	EDL10978.1	mCG5911	Mus musculus	group 1	
227	0	17554494	ref	NP_497892.1	PeRoXireDoXin family member (prdx-3)	Caenorhabditis elegans	group 1	FFYPLDFTFVCPTECSCSHLAWINTPRDGGLGSSGLSYRGLVK
228	0	3024728	sp	Q21824	TDX1_CAEEL Probable peroxiredoxin prdx-3 (Thioredoxin)	Caenorhabditis elegans	group 1	
229	0	3878943	emb	CAA83619.1	Hypothetical protein R07E5.2	Caenorhabditis elegans	group 1	
230	0	163856008	ref	YP_001630306.1	alkyl hydroperoxide reductase	Bordetella pertussis	group 3	YFYPKDFTFVCPTEVLLVKLAWRREHPHPEGVVALRAVSVNRTYVG
231	0	163259736	emb	CAF42037.1	alkyl hydroperoxide reductase	Bordetella pertussis	group 3	
232	0	8394432	ref	NP_058885.1	peroxiredoxin 2	Rattus norvegicus	group 1	FFYPLDFTFVCPTEVSVTHLAWINTPREGGLGVLKREGIAYRG
233	0	549132	sp	P35704	PRDX2_RAT Peroxioredoxin-2 (Thioredoxin peroxidase)	Rattus norvegicus	group 1	
234	0	514254	gb	AAA19559.1	thiol-specific antioxidant	Rattus norvegicus	group 1	
235	0	632720	gb	AA82034.1	TSA=thiol-specific antioxidant rats_brain_Peptide_19	Photobacterium profundum SS9	group 1	VLVFFYPDLDFVCPSEVSIHNAWRNTP1VDDGGIAGVAFRG
236	0	54309736	ref	YP_130756.1	putative antioxidant, AhpC/Tsa family	Photobacterium profundum SS9	group 1	
237	0	46914174	emb	CA620954.1	putative antioxidant, AhpC/Tsa family	Photobacterium profundum SS9	group 1	GSVFFYPADFSFVCPTEVHQAWHEQSAVAL1GQAYRGGQTVR
238	0	11633327	ref	YP_794288.1	Peroxioredoxin	Lactobacillus brevis ATCC 367	group 2	
239	0	116098108	gb	AB_J63257.1	Peroxioredoxin	Lactobacillus brevis ATCC 367	group 2	
240	0	19703279	ref	NP_602774.1	Alkyl hydroperoxide reductase C22 protein	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	group 2	VFYPADFTFVCPTEVSVHVKAWHADHSEVMIEGLALRGDNGIG
241	0	19713242	gb	AA194073.1	Alkyl hydroperoxide reductase C22 protein	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	group 2	
242	0	57168472	ref	ZP_00367606.1	antioxidant, AhpC/Tsa family V0731	Campylobacter coli RM2228	group 1	VLGFFYPKDFTFVCPSESHFAWKNTPVQGGIGEAVLRGVDI
243	0	57020280	gb	EAL58954.1	antioxidant, AhpC/Tsa family V0731	Campylobacter coli RM2228	group 1	
244	0	359894	emb	CAA06158.1	thiol-specific antioxidant protein	Fasciola hepatica	group 1	AFYPLDFTFVCPTECSTSHLQWTKMDRVGGIGIVLDQNTYRG
245	0	157828322	ref	YP_001494564.1	thioredoxin peroxidase 1	Rickettsia rickettsii str. 'Sheila Smith'	group 1	VGKFFYPDLDFVCPSEVSVTHLAWINTPRKGGLGDGVALRG
246	0	16780803	gb	ABY76056.1	thioredoxin peroxidase 1	Rickettsia rickettsii str. 'Sheila Smith'	group 1	
247	0	2829135	gb	AAC32310.1	peroxiredoxin-2	Onchocerca volvulus	group 1	FFYPLDFTFVCPTECSTSHLAWINTPRNGGLGVLKREGIAYRG
248	0	45826512	gb	AA57881.1	peroxiredoxin	Acetobacter radioresistans	group 2	FFYPADFTFVCPTEVSIHNAWRNTPVQGGIGVADRAGGIG

206	0	57506047	ref	ZP_00371970.1	antioxidant, AhpC/Tsa family, authentic frameshift	Campylobacter upsaliensis RM3195	group 1	VLGFFPKDFTFVCPSESHFAWKNKTIPIQGGIGEAVALRGVDT
207	0	57015655	gb	EAL52446.1	antioxidant, AhpC/Tsa family, authentic frameshift	Campylobacter upsaliensis RM3195	group 1	FFYPLDFTFVCPTEVSVTHLAWINTPREGGLVILKEGIAYRG
208	0	73986497	ref	XP_542042.2	PREDICTED: similar to Peroxiredoxin 2 (Thioredoxin PREDICTED: similar to Peroxiredoxin 2 (Thioredoxin	Canis familiaris	group 3	YFYPKDPSFLCPTLEMLMVKLAWRRELKFGDYKAGVALRAVSV
209	0	118044346	ref	ZP_01513061.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia phytofirmans PsJN	Burkholderia phytofirmans PsJN	group 1	FFYPLDFTFVCPTEVSVSHLAWIQSDRSRGGVGLDAGIALRG
210	0	11945657	gb	EAV02309.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia phytofirmans PsJN	Burkholderia phytofirmans PsJN	group 2	IDVFFYPADFTFVCPTECHKAWHDTSKGLADRGAAGGIVGK
211	1.78E-17	149372512	ref	ZP_01621253.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia phytofirmans PsJN	Burkholderia phytofirmans PsJN	group 4	FWYPKDFTFVCPTEGDTVFHFAWLNTPKNGGIEVLVDNVTYRA
212	0	11945657	gb	EAV02309.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia phytofirmans PsJN	Burkholderia phytofirmans PsJN	group 1	FFYPLDFTFVCPTEVLDVSDSHLAWIQTPRQGGIGEGVALRG
213	2.03E-11	134093319	ref	YP_001098394.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Synechococcus sp. WH 8102	Synechococcus sp. WH 8102	group 2	JFMPPAFTFNCPTESHKHWHIETSPVKGKAGLALRGEVWIKYSE
214	0	1134460621	ref	YP_01891624.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Tetradodon nigroviridis	Tetradodon nigroviridis	group 1	NLKFYPMDFTFVCPSESVITHNAWRNTPVYVGGIGAGVALRA
215	0	112822684	gb	AB124753.1	AhpC/Tsa family protein	Haemophilus somnus 129P7	group 1	AFYPLDFTFVCPTEKGAFLRRVLLTHKAWASIPRNVGLGISS
216	0	19168744	emb	YP_597628.1	THIOREDOXIN PEROXIDASE (THIOL-SPECIFIC AN	Haemophilus somnus 129P7	group 2	LFYPADFTFVCPTEVSTTHKAWHDSSVMIAGLAERGAAGGIG
217	0	92394580	ref	ABE175855.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Synechococcus sp. WH 8102	Synechococcus sp. WH 8102	group 1	FFYPLDFTFVCPTEVSHLAWIQSDRSRGGVGLDAGIALRG
218	0	116619551	ref	YP_821707.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Synechococcus sp. WH 8102	Synechococcus sp. WH 8102	group 3	MLGVGFEPKDFTFVCPTEVGLVHHAWRTHHAEVGAQRAVSV
221	0	72382192	ref	YP_291647.1	thioredoxin peroxidase	Solibacter salitatus Elin6076	group 1	FFYPLDFTFVCPTEVLDVSDSHLAWIQTPREGGIGDEADRGR
222	6.71E-12	58583268	ref	YP_202284.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Solibacter salitatus Elin6076	Solibacter salitatus Elin6076	group 2	WSVIFMPAAFTFNCPTESHKHWHIETSPVKGKAGLALRGEVWIK
223	0	84625104	ref	YP_452476.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Solibacter salitatus Elin6076	Solibacter salitatus Elin6076	group 1	VLSFFYPLDFTFVCPTEISVSHYKWRNTPVDGIGDSIALRA
224	0	67083336	gb	AAV66603.1	thioredoxin-dependent peroxide reductase	Xanthomonas oryzae pv. oryzae MAFF 311018	group 1	VLKFFYPLDFTFVCPTEVSVSHLAWINTPREGGIGLALRG
225	0	145936881	ref	XP_001434430.1	hypothetical protein GSPA1T00036186001	Paratubercium tetraurelia strain dh-2	group 1	FFYPLNFTFVCPTEVLDGGLGSSGLSIRGTHKPIEDKSK
226	0	149040547	gb	ED194585.1	peroxiredoxin 3	Rattus norvegicus	group 1	FFYPLDFTFVCPTEVSVSHLAWINTPREGGIGLALRG
227	1.07E-14	165900051	gb	EDR26500.1	hypothetical protein, conserved	Enhanoeba dispar SAW760	group 1	LVFYPLDFTFVCPTEQLKVSCHQAWCEADKGGVGTGYSRRG
228	5.26E-14	165983771	gb	EDR2652.0	hypothetical protein, conserved	Enhanoeba dispar SAW760	group 1	NVKLFYPLDFTFVCPTEVSVCHQAWCEADKGGVGTGYSRRG
229	7.16E-24	123459140	ref	XP_001316602.1	thioredoxin peroxidase, putative	Trichomonas vaginalis G3	group 1	FSYPLDFTFVCPTEVLDVSDSHLAWINTPREGGIGDGHILRG
230	0	49456297	emb	CAG46469.1	PRDX4	Homo sapiens	group 1	VDVFFYPLDFTFVCPTEVSHLAWINQPRHGGGLVLEKEGIAFRG
231	0	157824511	gb	ABV82431.1	Peroxiredoxin protein 2, isoform b	Caenorhabditis elegans	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPINGGIGAGVALRA
232	0	145636415	ref	YP_01792083.1	probable peroxiredoxin	Haemophilus influenzae PIHGH	group 1	VLVFFYPLDFTFVCPTEVSHLAWINQPRHGGGLVLEKEGIAFRG
233	1.62E-15	126132194	ref	XP_001382622.1	probable peroxiredoxin	Haemophilus influenzae PIHGH	group 1	AFIPLAFTFVCPTEVSHLAWINQPRHGGGLVLEKEGIAFRG
234	0	4620747	ref	ZP_00056418.2	COG0450: Peroxiredoxin	Magnetospirillum magnetotacticum MS-1	group 1	NLKFYPLDFTFVCPSEVSVTHLAWKNTPKVKGGLGGGVALRG
235	0	114797286	ref	YP_761712.1	alkyl hydroperoxide reductase C	Hyphomonas neptunum ATCC 15444	group 3	MLGIGFFPKDFTFVCPTEGTSVTLAWRREHAGVAVRAVLD
236	0	54298970	ref	YP_125339.1	alkyl hydroperoxide reductase	Hyphomonas neptunum ATCC 15444	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPVNGGIGAGVAFRRG
237	6.99E-20	56754885	gb	CAW14190.1	alkyl hydroperoxide reductase	Legionella pneumophila str. Paris	group 1	VFYPLDFTFVCPTECSTSHLAWTKLDRAAGLGNLKEGHAFRG
238	0	145628985	ref	ZP_01784784.1	uridine kinase	Schistosoma japonicum	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPINGGIGAGVALRA
239	0	154149007	ref	YP_01406657.1	probable peroxiredoxin	Haemophilus influenzae Pflit1	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPINGGIGAGVALRA
240	0	77459150	ref	YP_348696.1	2-cys peroxiredoxin BAS1	Haemophilus influenzae 22.1-21	group 2	FFYPADFTFVCPTEVSTVTAHAAWHNTSPVLAIGLADRDGGGVG
241	0	9965598	gb	AAAT4866.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Litomosoides sigmodontis	Litomosoides sigmodontis	group 1	FFYPLDFTFVCPTECSTSHLAWNTDRMGGLVLDKGIAYRG
242	0	84393921	ref	YP_00932663.1	alkyl hydroperoxide reductase C22 protein	Vibrio splendidus 12B01	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPINGGIGAGVAFRRG
243	0	148262378	ref	YP_0012239084.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Geobacter uraniumreducens R4	Geobacter uraniumreducens R4	group 1	FFYPLDFTFVCPSEVSVTHLAWKNTPVNNGGIGESVALRGAMIK
		146395878	gb	ABQ24511.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Geobacter uraniumreducens R4	Geobacter uraniumreducens R4	group 1	FFYPLDFTFVCPSEVSVTHLAWKNTPVNNGGIGESVALRGAMIK



244	0	78177972	ref	YP_394287.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Sulfurimonas denitrificans DSM 1251	group 1	VLAFFPLDFTFYCPSEVSHFAWRETPVSGGIGESVALRG
		78498512	gb	AB845052.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Sulfurimonas denitrificans DSM 1251	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
245	0	81301118	ref	YP_401326.1	thioredoxin peroxidase	Synechococcus elongatus PCC 7942	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
		31539390	gb	AAF49028.1	thioredoxin-peroxidase	Synechococcus sp. PCC 7942	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
246	0	81169999	gb	ABB58339.1	thioredoxin peroxidase	Synechococcus elongatus PCC 7942	group 1	VLVFFYPLDFTFYCPSEVSHHAWKNTPKVGGIGEGEIALRGNMK
		12721099	gb	AAK02879.1	TsaA	Pasteurella multocida subsp. multocida str. Pm70	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
247	0	145340570	ref	NP_245732.1	predicted protein	Pasteurella multocida subsp. multocida str. Pm70	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
		144875618	gb	ABO93887.1	predicted protein	Ostreococcus lucimarinus CCE9901	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
248	0	29150163	emb	CAD79625.1	alkyl hydroperoxide reductase C22 protein	Ostreococcus lucimarinus CCE9901	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
		34850277	emb	CAE47414.1	alkyl hydroperoxide reductase C22	Helicobacter pylori	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
		34850279	emb	CAE47415.1	alkyl hydroperoxide reductase C22	Helicobacter pylori	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
		34850281	emb	CAE47416.1	alkyl hydroperoxide reductase C22	Helicobacter pylori	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
249	0	6435547	pdb	1QO2	A Chain A, Crystall Structure Of A Mammalian 2-Cys Prx	Rattus norvegicus	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
		6435548	pdb	1QO2	B Chain B, Crystall Structure Of A Mammalian 2-Cys Prx	Rattus norvegicus	group 1	FFYPLDFTFYCPTEVSVSHLAWIQTSREGGLGVLDGIALRG
250	0	109158138	pdb	2H01	A Chain A, Py00414 - Plasmodium Yoelii Thioredoxin	Plasmodium Yoelii	group 1	YFYPLDFTFYCPSECVTHLAWKKTPLQGGIGESVALRAVLI
251	0	59712582	ref	YP_205358.1	alkyl hydroperoxide reductase C22 protein	Vibrio fischeri ES114	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
		59480683	gb	AAW06470.1	alkyl hydroperoxide reductase C22 protein	Vibrio fischeri ES114	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
252	0	154334818	ref	XP_001563956.1	tryparedoxin peroxidase	Leishmania braziliensis MHOM/BR/75/M2/904	group 1	FFYPLDFTFYCPTECVSAHLQWTLQERKGGGLVLDKGVAYVRG
		134060577	emb	CAMA2125.1	tryparedoxin peroxidase	Leishmania braziliensis	group 1	FFYPLDFTFYCPTECVSAHLQWTLQERKGGGLVLDKGVAYVRG
253	0	75043305	sp	G6B4J9	PRDX1, MYOLU Peroxidoxin-1	Myotis lucifugus	group 1	FFYPLDFTFYCPTEVSDSCHLAWINTPKQGGI, GVLKEGISFRG
		50593309	gb	AA179401.1	thioredoxin peroxidase	Myotis lucifugus	group 1	FFYPLDFTFYCPTEVSDSCHLAWINTPKQGGI, GVLKEGISFRG
254	0	52426576	ref	YP_088713.1	AhpC protein	Mannheimia succiniciproducens MBE1 65E	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAVQGGIGAGVALRA
		52307628	gb	AAU38128.1	AhpC protein	Mannheimia succiniciproducens MBE1 65E	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAVQGGIGAGVALRA
255	7.96E-13	17548466	ref	NP_521806.1	PROBABLE ALKYL HYDROPEROXIDE REDUCTASE	Raistonia solanacearum GMIT000	group 2	VEVNLKIFMPAAFTFNCPTESHKHWYHETSPSEGLALRGEVVK
		17430713	emb	CAD17396.1	probable alkyl hydroperoxide reductase (subunit c) oxidoreductase	Raistonia solanacearum	group 2	VEVNLKIFMPAAFTFNCPTESHKHWYHETSPSEGLALRGEVVK
256	1.08E-16	8927563	gb	AAE82118.1	AF276071_2, peroxidoxin	Thermus aquaticus	group 2	CFYPADFTFYCPTEVSTTHKAWHDTSPVLDGGLAQRGADGIG
257	0	37676710	ref	NP_937106.1	peroxidoxin	Vibrio vulnificus YJ016	group 2	NLTKTTIKFYFPADFTFYCPTEVSTTHKAWHDSDDQGLADRA
		37201253	dbj	BAC97076.1	peroxidoxin	Vibrio vulnificus YJ016	group 2	NLTKTTIKFYFPADFTFYCPTEVSTTHKAWHDSDDQGLADRA
259	0	93211500	gb	ABF01135.1	natural killer enhancing factor	Scaphthalmus maximus	group 1	FFYPLDFTFYCPTECVSHLAWINTPRQGGI, GVLKDGIAVRG
260	0	47220267	emb	CAG03301.1	unnamed protein product	Tetraodon nigroviridis	group 1	FFYPLDFTFYCPTECVSHLAWINTPRQGGI, GVLKDGIAVRG
		84569642	gb	ABC59169.1	natural killer enhancing factor B	Tetraodon nigroviridis	group 1	FFYPLDFTFYCPTECVSHLAWINTPRQGGI, GVLKDGIAVRG
261	2.22E-15	5029125	ref	XP_448495.1	unnamed protein product	Candida glabrata	group 1	AFVPLAFVYCPTESSLAWNTAVRDGGI, GVDVILLEGIALRG
		49627807	emb	CAG61456.1	unnamed protein product	Candida glabrata CBS 138	group 1	AFVPLAFVYCPTESSLAWNTAVRDGGI, GVDVILLEGIALRG
262	0	32186932	ref	NP_058000.3	peroxidoxin 2 isoform a	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKEGIAVRG
		109123651	ref	XP_00109159.1	PREDICTED: peroxidoxin 2 isoform 4	Macaca mulatta	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKEGIAVRG
		109123563	ref	XP_001109216.1	PREDICTED: peroxidoxin 2 isoform 5	Macaca mulatta	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKEGIAVRG
		114675617	ref	XP_524127.2	PREDICTED: peroxidoxin 2	Pan troglodytes	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		2507169	sp	P32119	PRDX2, HUMAN Peroxidoxin-2 (Thioredoxin peroxidase)	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		118597354	sp	Q2PFF2	PRDX2, MACFA Peroxidoxin-2	Macaca fascicularis	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		12653365	gb	AAH00452.1	Peroxidoxin 2	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		12804327	gb	AAH03022.1	Peroxidoxin 2	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		24659879	gb	AAH39428.1	Peroxidoxin 2	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		47496659	emb	CAG29352.1	PRDX2	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		49456535	emb	CAG46588.1	PRDX2	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		60818622	gb	AAAX36471.1	peroxidoxin 2	synthetic construct	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		61362999	gb	AAAX42317.1	peroxidoxin 2	synthetic construct	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		77744389	gb	ABB02182.1	peroxidoxin 2	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		84579087	dbj	BAE72977.1	hypothetical protein	Macaca fascicularis	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		119604715	gb	EAW64309.1	peroxidoxin 2, isoform CRA_b	Homo sapiens	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		123997455	gb	ABM66329.1	peroxidoxin 2	synthetic construct	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		157926986	gb	AAW03776.1	peroxidoxin 2	synthetic construct	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
263	0	71084314	gb	AAW23602.1	peroxidoxin 2	Leishmania aethiopia	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
264	0	157885981	emb	CAP09410.1	novel protein similar to vertebrate peroxidoxin 3 (PRDX3)	Danio rerio	group 1	VLSFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
265	0	109948144	ref	YP_665372.1	alkyl hydroperoxide reductase	Helicobacter acinonychis str. Sheeba	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
		109716365	emb	CAK00373.1	alkyl hydroperoxide reductase	Helicobacter acinonychis str. Sheeba	group 1	FFYPLDFTFYCPTEVSVTHLAWINTPREGGL, GVLKDGIAVRG
266	0	26897354	ref	NP_796959.1	antioxidant, AhpC/Tsa family	Vibrio parahaemolyticus RIMD 221 0633	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
		91225164	ref	ZP_01260386.1	antioxidant, AhpC/Tsa family	Vibrio alginolyticus T2G01	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
		116186594	ref	ZP_01476488.1	hypothetical protein VEK2w_02000966	Vibrio sp. Ex25	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
		153838066	ref	ZP_0190733.1	antioxidant, AhpC/Tsa family	Vibrio parahaemolyticus AQ3810	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
		28805566	dbi	BAC58843.1	antioxidant, AhpC/Tsa family	Vibrio parahaemolyticus RIMD 221 0633	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
		91190107	gb	EAS76376.1	antioxidant, AhpC/Tsa family	Vibrio alginolyticus T2G01	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
		149748533	gb	EDM59392.1	antioxidant, AhpC/Tsa family	Vibrio parahaemolyticus AQ3810	group 1	VLVFFYPLDFTFYCPSEVSHHAWRNTAIDGGIGAGVAFRG
267	1.14E-16	30260515	ref	NP_842892.1	alkyl hydroperoxide reductase, subunit C	Bacillus anthracis str. Ames	group 2	CFYPADFTFYCPTEVSTTHKAWHDSSEVLMFGLAARGADGIG
		47279521	ref	NP_976788.1	alkyl hydroperoxide reductase, subunit C	Bacillus cereus ATCC 10987	group 2	CFYPADFTFYCPTEVSTTHKAWHDSSEVLMFGLAARGADGIG
		47525612	ref	YP_016961.1	alkyl hydroperoxide reductase, subunit C	Bacillus anthracis str. Ames Ancestor	group 2	CFYPADFTFYCPTEVSTTHKAWHDSSEVLMFGLAARGADGIG
		49183368	ref	YP_026610.1	alkyl hydroperoxide reductase, subunit C	Bacillus anthracis str. Sterne	group 2	CFYPADFTFYCPTEVSTTHKAWHDSSEVLMFGLAARGADGIG
		49480063	ref	YP_034664.1	alkyl hydroperoxide reductase (peroxidoxin)	Bacillus thuringiensis serovar konkukian str. 97-27	group 2	CFYPADFTFYCPTEVSTTHKAWHDSSEVLMFGLAARGADGIG
		52144902	ref	YP_081926.1	probable alkyl hydroperoxide reductase (peroxidoxin)	Bacillus cereus E33L	group 2	CFYPADFTFYCPTEVSTTHKAWHDSSEVLMFGLAARGADGIG

	65317768	ref	ZP_0039027.1	COG0450: Peroxiredoxin	Bacillus anthracis str. A2012				
	118476093	ref	YP_839244.1	alkyl hydroperoxidase reductase, subunit C	Bacillus thuringiensis str. Al Hakam				
	658971427	ref	ZP_02216075.1	peroxiredoxin	Bacillus anthracis str. A0488				
	30253863	gb	AAFP24378.1	alkyl hydroperoxidase reductase, subunit C	Bacillus anthracis str. Ames				
	427358437	gb	AAAS39376.1	alkyl hydroperoxidase reductase, subunit C	Bacillus cereus ATCC 10987				
	47500760	gb	AAI29436.1	alkyl hydroperoxidase reductase, subunit C	Bacillus anthracis str. Ames Ancestor				
	49177285	gb	AAI5286.1	alkyl hydroperoxidase reductase, subunit C	Bacillus anthracis str. Sterne				
	49331619	gb	AAI16265.1	probable alkyl hydroperoxidase reductase (peroxiredoxin)	Bacillus thuringiensis serovar konkukian str. 97-27				
	51978371	gb	AAU19821.1	probable alkyl hydroperoxidase reductase (peroxiredoxin)	Bacillus cereus E33L				
	118415318	gb	ABK83737.1	alkyl hydroperoxidase reductase, subunit C	Bacillus thuringiensis str. Al Hakam				
	164712911	gb	EDR18440.1	peroxiredoxin	Bacillus thuringiensis str. A0488				
268	0	3650468	AAAC1301.1	alkyl hydroperoxidase reductase: AhpC	Mycobacterium marinum	group 3			LLTIGTFWPKDFTVCPTEVLGIDSVHFQWRQAHDDGVADRV
269	0	15604195	ref	NP_220710.1	THIOREDOXIN PEROXIDASE 1 (tpX1)	Rickettsia prowazekii str. Madrid E	group 1		VGKFFYPLDFTVCPSEVSVSLAWKNTPTPKGGGLGDGIALRG
		3860887	emb	CAA14787.1	THIOREDOXIN PEROXIDASE 1 (tpX1)	Rickettsia prowazekii	group 1		VLGFYPMDFTFVCPSEVSVCSHFHWKEFTPVKGGIGAGVALRG
270	0	154716542	ref	ZP_001408847.1	membrane protein	Campylobacter curvus 525-92	group 1		VGKFFYPLDFTVCPSEVSVSLAWKNTPTPKGGGLGDGVALRG
		112803678	gb	EAU01022.1	peroxiredoxin	Rickettsia sibirica 246	group 1		NMKFFYPMDFTFVCPTEVSTTHLAWINTDRDNGLEGIALRG
271	0	34580622	ref	ZP_00142102.1	thioredoxin peroxidase 1	Rickettsia sibirica 246	group 1		WWSVIFMPAAFTFNCPTEESHKVVHETSPVQKEGLALRQEGVVK
272	0	157692100	ref	YP_001486562.1	peroxiredoxin YkuU	Bacillus pumilus SAFR-032	group 1		
273	6.27E-12	21241677	ref	ABV62002.1	peroxiredoxin YkuU	Bacillus pumilus SAFR-032	group 2		
		78048499	ref	YP_362674.1	alkyl hydroperoxidase reductase subunit C	Xanthomonas axonopodis pv. citri str. 306			
		2098746	gb	AAAC45425.1	alkyl hydroperoxidase reductase subunit C	Xanthomonas campestris pv. vesicatoria str. 85-10			
		21107042	gb	AAAG5795.1	alkyl hydroperoxidase reductase subunit C	Xanthomonas campestris			
		78034920	emb	CAJ29574.1	alkyl hydroperoxidase reductase subunit C	Xanthomonas axonopodis pv. citri str. 306			
274	7.42E-18	89496524	ref	ZP_01169416.1	alkyl hydroperoxidase reductase (small subunit)	Xanthomonas campestris pv. vesicatoria str. 85-10	group 2		CFYPADFTFVCPTEVSTTHKAWHDHSEVLEDEGLADRAGGIG
		89088539	gb	EAR67648.1	alkyl hydroperoxidase reductase (small subunit)	Bacillus sp. NRRL B-14911	group 2		
275	0	50539996	ref	NP_001002468.1	hypothetical protein LOC43674.1	Bacillus sp. NRRL B-14911	group 1		FFYPLDFTVCPTESHLAWINTPRQGGGLGVLEKGIAYGRSV
		49800827	gb	AAH76347.1	PREDICTED: hypothetical protein	Danio rerio	group 1		
		15788860	emb	CAP09310.1	peroxiredoxin 1	Danio rerio	group 1		
276	0	60634541	gb	AAK37099.1	peroxiredoxin 4	Danio rerio	group 1		
277	5.65E-14	57866005	ref	YP_187698.1	alkyl hydroperoxidase reductase, C subunit	Synthetic construct	group 1		VSVLEKFFYPLDFTVCPTEIETHLAWINTPRQGGGLGSGHTLRR
		81819462	gb	G51HR1	AHPC STAEQ Alkyl hydroperoxidase reductase subunit	Staphylococcus epidermidis RP62A	group 2		CFYPADFSEVCPTEVSTVHKAWHDHSDVLDTLGLAORGADGIG
		57636663	gb	AAW63451.1	alkyl hydroperoxidase reductase, C subunit	Staphylococcus epidermidis RP62A			
278	0	14029099	gb	AAK51148.1	26,000 kDa protein	Helicobacter pylori	group 1		FFWPKDFTVCPTEVSHVFAWKNTPVKGGIGEAALRGNMK
279	1.53E-14	149278224	ref	ZP_01884362.1	peroxiredoxin	Pedobacter sp. BAL39	group 3		FWMPKDFTVCPTEVSHLAWIRHNDLRLGKEKAFRAVSVLD
		149230990	gb	EDM86371.1	peroxiredoxin	Pedobacter sp. BAL39	group 3		
280	0	56757159	gb	AAW27020.1	SJCHGC02884 protein	Schistosoma japonicum	group 1		NLKFFYPADFTFVCPTECSHSLAWTKQDRSGGLGEGNAFRG
281	0	33661413	ref	NP_892974.1	thioredoxin peroxidase	Prochlorococcus marinus subsp. pastoris str. COMP1986	group 1		FFYPLDFTVCPTEVSLGVDSDHSLAWIQTPREGGGLGEGADRQ
		33633990	emb	CAE19315.1	thioredoxin peroxidase	Prochlorococcus marinus subsp. pastoris str. COMP1986	group 1		
282	0	114770713	ref	ZP_01448203.1	putative alkyl hydroperoxidase reductase, subunit C	alpha proteobacterium HTCC2255	group 2		LFYPADFTFVCPTEVSHVFAWKHDHSEVMIAGALRGDLGIG
283	0	113970711	ref	YP_734504.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella sp. MR-4	group 1		VLVFFYPLDFTVCPSEVSTHNAWRNTPVKGGIGAGVAFRG
		114047940	ref	YP_738490.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella sp. MR-7			
		117920982	ref	YP_870174.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella sp. ANA-3			
		113885395	gb	ABI39447.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella sp. MR-4			
		113888382	gb	ABI43433.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella sp. MR-7			
		117613314	gb	ABK48768.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella sp. ANA-3			
284	0	24372545	ref	NP_716587.1	alkyl hydroperoxidase reductase, C subunit	Shewanella oneidensis MR-1	group 2		FFYPADFTVCPTEVSTTHKAWHDHSDVMIEGLALRGDLGIG
		24346560	gb	AAAN54032.1	AEO15541_2 alkyl hydroperoxidase reductase, C subunit	Shewanella oneidensis MR-1	group 2		
285	2.90E-17	13786919	pub	IE2Y	A Chain A. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		LFYPLDFTVCPTECSHSLAWTKQDRSGGLGVLDSGVAYRG
		13786920	pub	IE2Y	B Chain B. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786921	pub	IE2Y	C Chain C. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786922	pub	IE2Y	D Chain D. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786923	pub	IE2Y	E Chain E. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786924	pub	IE2Y	F Chain F. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786925	pub	IE2Y	G Chain G. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786926	pub	IE2Y	H Chain H. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786927	pub	IE2Y	I Chain I. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
		13786928	pub	IE2Y	J Chain J. Tryparedoxin Peroxidase From Crithidia F.	Crithidia Fasciculata	group 1		
286	0	157346136	emb	CAO15833.1	unnamed protein product	Vitis vinifera	group 1		FFYPLDFTVCPTEVSHLAWTKQDRSGGLGVLIQGVYALRG
287	2.09E-15	156844947	ref	XP_001645534.1	hypothetical protein Kpnl_1004p51	Vandewaliozyma polyspora DSM 70294	group 1		AFIPLAFTVCPTESSLAWNTVARDGGLGVDVILEGIALRG
		156118198	gb	EDO17678.1	hypothetical protein Kpnl_1004p51	Vandewaliozyma polyspora DSM 70294	group 1		
288	0	54301415	gb	AAV33162.1	alkyl hydroperoxidase reductase	Helicobacter pylori	group 1		FFWPKDFTVCPTEVSHVFAWKNTPVKGGIGEAALRGNMK
		54301417	gb	AAV33163.1	alkyl hydroperoxidase reductase	Helicobacter pylori	group 1		
		58198721	gb	AAW86000.1	alkyl hydroperoxidase reductase	Helicobacter pylori	group 1		
289	1.87E-16	138898143	ref	YP_001126596.1	Alkyl hydroperoxidase reductase, subunit C	Geobacillus thermodenitrificans N680-2	group 2		CFYPADFTFVCPTEVSTTHKAWHDHSDVLDGLAORGADGIG
		134267656	gb	ABO67851.1	Alkyl hydroperoxidase reductase, subunit C	Geobacillus thermodenitrificans N680-2	group 2		
290	2.03E-17	118497565	ref	YP_898615.1	peroxiredoxin of the AhpC/TSA family	Francisella tularensis subsp. novicida U112	group 1		VLVFFYPLDFTVCPSEVSVTHNAWRNTPIDGGIGGGMAFRG
		118423471	gb	ABK89861.1	peroxiredoxin of the AhpC/TSA family	Francisella tularensis subsp. novicida U112	group 1		



323	4.89E-21	123385230	ref	XP_001299092.1	trypanothione peroxidase, putative	<i>Trichomonas vaginalis</i> G3	group 1	FSYPLDFTFVCPTEVLGVDSHSLAWRNTPREGGLGAGHDLRGLG
		121879854	gb	EA_X86162.1	trypanothione peroxidase, putative	<i>Trichomonas vaginalis</i> G3	group 1	FFYPLDFTFVCPTEVSVCHLPWINPKQGGGLVLEKGISFRG
324	0	94400195	ref	XP_001003388.1	PREDICTED: similar to MSP23 isoform 2	<i>Mus musculus</i>	group 1	ELKFFYPLDFTFVCPTECSVTHLAWINTPRQGGLSGSHHTLRG
		148666674	gb	EDK98090.1	trcG127770	<i>Mus musculus</i>	group 1	
325	0	149243259	pdb	2PN8	A Chain A, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243260	pdb	2PN8	B Chain B, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243261	pdb	2PN8	C Chain C, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243262	pdb	2PN8	D Chain D, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243263	pdb	2PN8	E Chain E, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243264	pdb	2PN8	F Chain F, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243265	pdb	2PN8	G Chain G, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243266	pdb	2PN8	H Chain H, Crystall Structure Of Human Peroxiredoxin	<i>Homo sapiens</i>	group 1	
		149243267	pdb	2PN8	I Chain I, Crystall Structure Of Human Peroxiredoxin 4	<i>Homo sapiens</i>	group 1	
		149243268	pdb	2PN8	J Chain J, Crystall Structure Of Human Peroxiredoxin 4	<i>Homo sapiens</i>	group 1	
326	3.07E-16	88713494	ref	ZP_01107576.1	putative thioredoxin peroxidase	<i>Flavobacteriales bacterium</i> HTCC2170	group 4	VLEFWPKDFTFVCPTECDTVHFAWLNTAKNGGIEDNVTYRA
		88708004	gb	EAR00242.1	putative thioredoxin peroxidase	<i>Flavobacteriales bacterium</i> HTCC2170	group 4	
327	0	14928070	gb	ABR23404.1	thioredoxin peroxidase	<i>Onchocerca paheri</i>	group 1	FFYPLDFTFVCPTECSAGHLAWINTPREGGGLVLEKIGIFERG
328	0	3193232	gb	AACT7922.1	peroxidoxin-2	<i>Onchocerca ochengi</i>	group 1	FFYPLDFTFVCPTECSSTHLAWINTDRMGGGLVLEKGIAYRAG
329	0	113969145	ref	YP_732938.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Shewanella sp. MR-4</i>	group 2	FFYPAADFVCPTEVSTTHKAWHDTSDVMIEGLALRGDGLGIG
		114048713	ref	YP_739263.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Shewanella sp. MR-4</i>	group 2	
		113883829	pdb	AB137881.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Shewanella sp. MR-4</i>	group 1	
		113890155	pdb	AB144206.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Shewanella sp. MR-4</i>	group 1	
330	4.95E-23	123974738	ref	XP_001330098.1	thioredoxin peroxidase	<i>Trichomonas vaginalis</i> G3	group 1	FSYPLDFTFVCPTEVLGVDSHSLAWINTPREGGGLGAGHDLRGLG
		34542000	gb	AAO74891.1	thioredoxin peroxidase	<i>Trichomonas vaginalis</i>	group 1	
		121695915	gb	EAY01083.1	thioredoxin peroxidase	<i>Trichomonas vaginalis</i> G3	group 1	
331	0	159483223	ref	XP_001699860.1	2-cys peroxiredoxin	<i>Chlamydomonas reinhardtii</i>	group 1	FFYPLDFTFVCPTEIDSTHLAFSNTPRKGGGLVLIAGVTLRGLG
		158281602	gb	EDP07356.1	2-cys peroxiredoxin	<i>Chlamydomonas reinhardtii</i>	group 1	
332	0	152997390	ref	YP_001342225.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Marimononas sp. MWYL1</i>	group 1	VLAFFYPLDFTFVCPSEVSIHNAWRNTPVQGGIGAGVAMRA
		150838314	gb	ABR72290.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Marimononas sp. MWYL1</i>	group 1	
333	8.81E-18	114332323	ref	YP_748545.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Nitrosomonas europha C91</i>	group 2	NTTKVFPADFTFVCPTEVSTTHKAWHDSVSLIEGLALRGLG
		114509337	gb	AB160580.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Nitrosomonas europha C91</i>	group 2	
334	0	145833765	ref	XP_001452627.1	hypothetical protein GSPAT000026330001	<i>Paramecium tetraurelia strain d4-2</i>	group 1	FNKQFRISLFFYPLDFTFVCPTEVSVNGGLGFGVAFRGLR
		124420326	emb	CAK65230.1	unnamed protein product	<i>Paramecium tetraurelia</i>	group 1	
335	0	111020264	ref	YP_703236.1	alkyl hydroperoxide reductase	<i>Rhodococcus sp. RHA1</i>	group 2	YFYPADFTFVCPTEVSTTHKAWHGSVSLREGLADRGAEIG
		110819794	gb	ABG96078.1	alkyl hydroperoxide reductase	<i>Rhodococcus sp. RHA1</i>	group 2	
336	4.57E-14	67462491	ref	XP_647907.1	peroxiredoxin	<i>Entamoeba histolytica HM-1:IMSS</i>	group 1	RIKAKFKFINLYPLDWTFCVPTQLKYSVKGGVGGAGIARRRG
337	4.95E-14	165898903	gb	EDR25942.1	hypothetical protein, conserved	<i>Entamoeba dispar</i> SAW760	group 1	LFYPLDWTFCVPTQLKYSVKGGVGGAGIARRRG
338	0	15598725	ref	NP_252219.1	probable peroxidase	<i>Pseudomonas aeruginosa PAO1</i>	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPVKGIGGGVAFRGLG
		84319755	ref	NP_00968145.1	COG0450: Peroxiredoxin	<i>Pseudomonas aeruginosa PAO1</i>	group 1	
		84325803	ref	ZP_00973835.1	COG0450: Peroxiredoxin	<i>Pseudomonas aeruginosa C3719</i>	group 1	
		107103041	ref	ZP_01386959.1	hypothetical protein PaerPA_01004110	<i>Pseudomonas aeruginosa 2192</i>	group 1	
		116051528	ref	YP_789636.1	putative alkyl hydroperoxide reductase subunit	<i>Pseudomonas aeruginosa UCBPP-PA14</i>	group 1	
		152986134	ref	YP_001347002.1	probable peroxidase	<i>Pseudomonas aeruginosa PAO1</i>	group 1	
		9949678	gb	AAO06917.1	AE004773.6 probable peroxidase	<i>Pseudomonas aeruginosa PAO1</i>	group 1	
		115686749	gb	ABJ12764.1	putative alkyl hydroperoxide reductase subunit	<i>Pseudomonas aeruginosa UCBPP-PA14</i>	group 1	
		126168384	gb	EA_Z53895.1	hypothetical protein PACG_02440	<i>Pseudomonas aeruginosa C3719</i>	group 1	
		126196567	gb	EA_Z59630.1	hypothetical protein PAZG_02923	<i>Pseudomonas aeruginosa 2192</i>	group 1	
		150961292	gb	ABR83317.1	probable peroxidase	<i>Pseudomonas aeruginosa PAO1</i>	group 1	
339	0	1841155	ref	NP_568166.1	2-cys peroxiredoxin, chloroplast, putative	<i>Arabidopsis thaliana</i>	group 1	VLLFFYPLDFTFVCPTEVSVSHLAWVQIDRSVGLGGIALLRGLG
		11908048	gb	AAO41453.1	AF326871.1 putative 2-cys peroxiredoxin protein	<i>Arabidopsis thaliana</i>	group 1	
		12642866	gb	AAO00375.1	AF339693.1 putative 2-cys peroxiredoxin protein	<i>Arabidopsis thaliana</i>	group 1	
		15451082	gb	AAK96812.1	2-cys peroxiredoxin-like protein	<i>Arabidopsis thaliana</i>	group 1	
		201463449	gb	AAIM10065.1	2-cys peroxiredoxin-like protein	<i>Arabidopsis thaliana</i>	group 1	
340	0	124515015	gb	EAY56526.1	Peroxiredoxin	<i>Leptospiillum sp. Group II USA</i>	group 1	FFWPLDFTFVCPTEVSVTHLAWKKTPEGGIGVLLVESVALRGLG
341	0	56477933	ref	YP_159522.1	predicted peroxiredoxin	<i>Azococcus sp. Ebn1</i>	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPVSGIGGGVAFRGLG
		56313976	emb	CAI06621.1	predicted peroxiredoxin	<i>Azococcus sp. Ebn1</i>	group 1	
342	1.49E-11	145568715	ref	YP_001156312.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Oryzuela bacter sp. QLW-P1DMWA-1</i>	group 2	IFMPAAFTFVCPTEVSHKWHETSPVKGKAGLALRGEIGIKYSE
		145048121	ref	ABP34748.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Oryzuela bacter sp. QLW-P1DMWA-1</i>	group 2	
343	0	146831053	gb	ABP59556.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Oryzuela bacter sp. 638</i>	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPVKGIGGGVAFRGLG
		145317409	gb	ABP59556.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Oryzuela bacter sp. 638</i>	group 1	
344	2.63E-11	15605333	gb	NP_220119.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis D/UW-3/CX</i>	group 4	ISLFFYPKDFTYVCPTEVLGTHSRWLAVARAGGIEGSLALRA
		3329048	gb	AAO68206.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis D/UW-3/CX</i>	group 4	
		158148188	emb	CAP08900.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis</i>	group 4	
		158148192	emb	CAP08900.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis</i>	group 4	
		158148194	emb	CAP08900.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis</i>	group 4	
		158148196	emb	CAP08900.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis</i>	group 4	
		158148198	emb	CAP08900.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis</i>	group 4	
		158148200	emb	CAP08900.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis</i>	group 4	
		158148202	emb	CAP08900.1	Thio-Specific Antioxidant (TSA) Peroxidase	<i>Chlamydia trachomatis</i>	group 4	

345	158148204	emb	CAP08908.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis				
	16923958	ref	NP_476455.1	peroxidoxin 1	Rattus norvegicus	group 1		FFYPLDFTFVCPTEVDSCHLAWMINTPKQGGGLGVLKEGISFRG	
	2498470	dbi	O637.16	PRDX1_RAT Peroxidoxin-1 (Thio redoxin peroxidase)	Rattus norvegicus				
	1060977	dbi	BAA06275.1	heme-binding 23 kDa protein (HBP23)	Rattus norvegicus				
	34849851	gb	AAH88450.1	Peroxidoxin 1	Rattus norvegicus				
	56789700	gb	AAH88118.1	Peroxidoxin 1	Rattus norvegicus				
	149035583	gb	EDL902864.1	TCG5201	Rattus norvegicus	group 3		VLTVSLFAWPKDFTFVCPTEVSHHAWPKOHDDGFAKRAAGSVG	
346	9.91E-13		4927942	AF1275676_1 alkyl hydroperoxide reductase	Streptomyces viridosporus	group 1		FFYPLDFTFVCPTEVSVSHLAWMINTPRNGGLGVLLAGIALRG	
347	0		118597399	PRDX3_RAT Thio redoxin-dependent peroxidase	Rattus norvegicus	group 1		FFYPLDFTFVCPTEVSVVCHLAWMINTPRSSGGGLVLLPGIALRG	
	0		71896087	prdx3 protein	Xenopus tropicalis	group 1		FFYPLDFTFVCPTEVSVVCHLAWMINTPRSSGGGLVLLPGIALRG	
	0		60551816	prdx3 protein	Xenopus tropicalis	group 1		VGKFFYPLDFTFVCPSEVSVSHLAWMINTPKHGGGLGDGIALRG	
349	0		51473523	thioredoxin peroxidase I	Rickettsia typhi str. Wilmington	group 1		VLVFFYPLDFTFVCPSEVSVTHNAWRNTPVKGKIGAGVALRG	
	0		51459835	thioredoxin peroxidase I	Rickettsia typhi str. Wilmington	group 1			
	0		153207542	antioxidant, AhpC/IT sa family	Coxiella burnetii RSA 334	group 1			
	0		165918351	antioxidant, AhpC/IT sa family	Coxiella burnetii RSA 334	group 1			
	0		120576510	EAx33134.1	Coxiella burnetii MSU Goat Q177'	group 1			
	0		121543961	ABM5645.1	Coxiella burnetii RSA 334	group 1		FFYPLDFTFVCPTEGDSCHLAWMINTPROGGLGTGIPFRGSMK	
	0		165918001	EDR36605.1	antioxidant, AhpC/IT sa family	group 1		FFYPLDFTFVCPTEVSVSHLAWMINTPRNGGLGVLLSGLALRG	
	0		114633017	XP_001153938.1	putative cytosolic thioredoxin peroxidase	group 2		FFYPADFTFVCPTEVSVTHKAWHSSSEEGADRAAEGIGVKG	
	0		7576552	PREDICTED: peroxidoxin 3 isoform 1	Pan troglodytes				
	0		7576553	A Chain A, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576554	B Chain B, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576555	C Chain C, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576556	D Chain D, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576557	E Chain E, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576558	F Chain F, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576559	G Chain G, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576560	H Chain H, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576561	I Chain I, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
	0		7576561	J Chain J, Structural And Biochemical Analysis Of The	Salmonella typhimurium				
354	5.62E-14		158936	AAA29095.1	cysteine-rich surface antigen	group 1		RIKAFKFINLIFYPLDFTFVCPTEQLKVSVKGGVGGAGIARRG	
	0		124023166	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9303	group 1		FFYPLDFTFVCPTEVILGSHLAWIQTSREGGLGISTAGVALRG	
	0		123963452	ABM78208.1	Prochlorococcus marinus str. MIT 9303	group 1			
356	0		91086349	XP_970797.1	Tribolium castaneum	group 1		FFYPLDFTFVCPTECSTSHLAWMINTPRQGGGLVLDAGVTFRRG	
357	0		120599227	ref	YP_963801.1	group 1		VLVFFYPLDFTFVCPSEVSVTHNAWRNTPVKGKIGAGVAFRRG	
	0		124549550	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella sp. W3-18-1				
	0		146292699	ref	YP_01707728.1				
	0		120559320	ABM25247.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella putrefaciens CN-32			
	0		124507834	EA51948.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella putrefaciens CN-32			
	0		145564389	ABP75324.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella putrefaciens CN-32			
	0		60686276	AAH91544.1	Prdx3 protein	Danio rerio	group 1	FFYPLDFTFVCPTEVSVTHLAWMINTPRSSGGGLVLLPGIALRG	
	0		17157991	ref	NP_477510.1	group 1		FFYPLDFTFVCPTECSTSHLAWMINTPRQGGGLVLDGTGIPRRG	
	0		124641739	ref	NP_727689.1				
	0		27734441	sp	O9V3P0				
	0		7230426	AAE2985.1	AF167088_1 thioredoxin peroxidase 1	Drosophila melanogaster			
	0		12744769	AAK06770.1	AF-321615_1 cytosolic thioredoxin peroxidase variant 2	Drosophila melanogaster			
	0		12744791	AAK06771.1	AF-321616_1 cytosolic thioredoxin peroxidase variant 2	Drosophila melanogaster			
	0		7292861	AAE48253.1	CG1633-PA, isoform A	Drosophila melanogaster			
	0		17944221	AA148005.1	GM14788p	Drosophila melanogaster			
	0		47271168	AA127254.1	SD27832p	Drosophila melanogaster			
360	0		149907723	ref	XP_01896470.1	group 1		VLVFFYPLDFTFVCPSEVSVSHNAWRNITSIDGGIGAGVAFRRG	
	0		149809393	EDM89322.1	alkyl hydroperoxide reductase C22 protein	Moritella sp. PE36	group 1	FFYPADFTFVCPTEVSTTHKAWHSSSEEGADRAAEGIGVKG	
361	0		75765537	1YEP	A Chain A, Structural And Biochemical Analysis Of The	Salmonella typhimurium	group 2		
	0		75765538	1YEP	B Chain B, Structural And Biochemical Analysis Of The	Salmonella typhimurium			
	0		75765539	1YEP	C Chain C, Structural And Biochemical Analysis Of The	Salmonella typhimurium			
	0		75765540	1YEP	D Chain D, Structural And Biochemical Analysis Of The	Salmonella typhimurium			
	0		75765541	1YEP	E Chain E, Structural And Biochemical Analysis Of The	Salmonella typhimurium			
362	0		37622727	ref	NP_926104.1	group 1		FFYPLDFTFVCPTEVILGCDSSSHAWMISTPREGYSQRGGGIC	
	0		35213729	dbi	BAC91089.1	gll3158	group 1		
363	6.86E-16		124008543	ref	XP_01691376.1	group 3		FVWPKDFTFVCPTEVSHLAWRNHDLRGLKENIARVSVVLD	
	0		123987956	gb	EA427636.1	alkylhydroperoxide reductase	group 1		
	0		7339588	emb	CABR2860.1	2-Cys-peroxidoxin	group 2		
364	0		28901538	ref	NP_801193.1	alkyl hydroperoxide reductase c22 protein	group 1	FFYPLDFTFVCPTEVSTSHLAWIQTDSSGGGLVLIQIALRG	
365	0		153838449	ref	XP_0191116.1	peroxidoxin	group 2	VLGFFYPADFTFVCPTEVSTTHKAWHDSSEQGLADRAAEGIG	
	0		28810085	dbi	BAC63026.1	alkyl hydroperoxide reductase c22 protein			
	0		149748169	gb	EDM85028.1	peroxidoxin			
366	0		159903445	ref	YP_001550789.1	thioredoxin peroxidase	group 1	FFYPLDFTFVCPTEVILGVDSSHLAWIQTDQRDGGIGEGVALRG	

367	4.40E-12	159888621	gb	ABX08835.1	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9211		group 2	WSVIFMPAAFTFNCPITESHKAWHEITSPYKGEGLALRGEQGVK
		119897060	ref	YP_932273.1	alkyl hydroperoxidase reductase subunit C	Azarcus sp. BH72		group 2	FFYPADFTFVCPTEVSTTHKAWHDTSDVMIDGLALRGDLGIG
368	0	119869473	emb	CAL93386.1	alkyl hydroperoxidase reductase subunit C	Azarcus sp. BH72		group 2	FFYPADFTFVCPTEVSTTHKAWHDTSDVMIDGLALRGDLGIG
		153002026	ref	YP_001367707.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella baltica OS185			
		160876744	ref	YP_001586060.1	peroxiredoxin	Shewanella baltica OS195			
		160862266	gb	ABX50800.1	peroxiredoxin	Shewanella baltica OS195			
369	0	1617118	emb	CAAS7764.1	TSA	Shewanella baltica OS195		group 1	ISSFFYPDLDFVCPTEVLSHLAWVQTDRLSGLGGGIALRG
370	0	21592588	gb	AAAM64537.1	putative 2-oxo peroxidoreductin BAS1 precursor (thiol-sp)	Arabisopsis thaliana		group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNIPVKGGGAGVAFRG
371	0	127512445	ref	ABO23383.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella loihica PV-4		group 1	FFYPDLDFTFVCPTECVSHLAWINSPREGGLGVLEGHHLRG
372	0	15637725	ref	XP_001630757.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella loihica PV-4		group 1	FFYPDLDFTFVCPTECVSHLAWINSPREGGLGVLEGHHLRG
		156217784	gb	EDO38694.1	predicted protein	Nematostella vectensis		group 1	FFYPDLDFTFVCPTEVSTHAWINTPREGGLGVLEKGIAYRG
374	0	34849738	gb	AAH88481.1	Peroxiredoxin 2	Rattus norvegicus		group 1	FFYPDLDFTFVCPTEVSTHAWINTPREGGLGVLEKGIAYRG
		149037815	gb	EDJ92175.1	RC5Y106, isoform CRA_d	Rattus norvegicus		group 1	FFYPDLDFTFVCPTEVSTHAWINTPREGGLGVLEKGIAYRG
375	1.25E-24	67083703	gb	AAV68786.1	mitochondrial truncated thioredoxin-dependent peroxidase	Xodes scapularis		group 1	VLKFFYPLDFVCPTEVSVSHLAWNTNPROGGLGAGLALRG
376	0	134295970	ref	YP_001119705.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Burkholderia vietnamiensis G4		group 3	YFYPKDFTFVCPTEVLLVYLAWRRRHKFGDYKAGVALRAVS
		134139127	gb	ABO54870.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Burkholderia vietnamiensis G4		group 1	VLVFFYPLDFTFVCPSEVSTHAWINRTPKGGIGAAVAYRG
377	4.29E-19	53804842	ref	YP_113499.1	antioxidant, AhpC/Tsa family protein	Methylococcus capsulatus str. Bath		group 1	FFYPADFTFVCPTEVSTHAWINRTPKGGIGAAVAYRG
		53758603	gb	AAU92894.1	antioxidant, AhpC/Tsa family protein	Methylococcus capsulatus str. Bath		group 2	FFYPADFTFVCPTEVSTHAWINRTPKGGIGAAVAYRG
378	0	154493907	ref	YP_02033227.1	hypothetical protein PARMER_03251	Parabacteroides merdae ATCC 43184		group 1	FFYPADFTFVCPTEVSTHAWINRTPKGGIGAAVAYRG
		87124628	ref	YP_01080476.1	hypothetical protein PARMER_03251	Parabacteroides merdae ATCC 43184		group 1	FFYPADFTFVCPTEVSTHAWINRTPKGGIGAAVAYRG
379	0	154086167	gb	EDN85212.1	thioredoxin peroxidase	Synechococcus sp. R39917		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
380	1.48E-21	123498272	ref	EAQ68766.1	thioredoxin peroxidase, putative	Synechococcus sp. R39917		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		121908848	gb	EAY14705.1	tyrosine peroxidase, putative	Trichomonas vaginalis G3		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
381	2.03E-16	68835220	ref	YP_248925.1	tyrosine peroxidase, putative	Trichomonas vaginalis G3		group 2	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		68262819	emb	CAI36307.1	alkyl hydroperoxidase reductase	Corynebacterium jeikeium K411		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
382	0	45360655	ref	NP_989001.1	alkyl hydroperoxidase reductase	Corynebacterium jeikeium K411		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		38174215	gb	AAH61276.1	Peroxiredoxin 2	Xenopus tropicalis		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		89268923	emb	CAJ82908.1	Peroxiredoxin 2	Xenopus tropicalis		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
383	0	1145717426	ref	YP_758106.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Marticola maris MC510		group 3	MLGIGFFYPKDFTFVCPTECKLAWRRRHPIDSEGVAYRAVL
		114341888	gb	ABM67168.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Marticola maris MC510		group 1	MLGIGFFYPKDFTFVCPTECKLAWRRRHPIDSEGVAYRAVL
384	0	119509654	ref	YP_01628800.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Nodularia spumigena CCY9414		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		119465673	gb	EAW46564.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Nodularia spumigena CCY9414		group 4	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
386	4.49E-16	163758961	ref	YP_02164068.1	alkyl hydroperoxidase reductase, subunit C	Kordia algicida OT-1		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		161323080	gb	EDP94422.1	alkyl hydroperoxidase reductase, subunit C	Kordia algicida OT-1		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
387	0	157146891	ref	YP_001454300.1	hypothetical protein CKO_02758	Citrobacter koseri ATCC BAA-895		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		157084186	gb	ABY13864.1	hypothetical protein CKO_02758	Citrobacter koseri ATCC BAA-895		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
388	0	157105671	ref	XP_001648972.1	peroxiredoxins, prx-1, prx-2, prx-3	Aedes aegypti		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		108868966	gb	EAT133191.1	peroxiredoxins, prx-1, prx-2, prx-3	Aedes aegypti		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
389	0	29337026	gb	Q8T76C.1	TDX, ECHGR, Thioredoxin peroxidase (Peroxiredoxin)	Echinococcus granulosus		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		19073473	gb	AAJ84833.1	AF-478688, 1 Thioredoxin peroxidase	Echinococcus granulosus		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
390	0	118701617	ref	YP_01559672.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Burkholderia ambifaria MCA0-6		group 3	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		118640899	gb	EAIV4756.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Burkholderia ambifaria MCA0-6		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
391	2.45E-15	50303323	ref	XP_451603.1	unnamed protein product	Kluyveromyces fragilis		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		49840735	emb	CAH01998.1	unnamed protein product	Kluyveromyces fragilis NRRL Y-1140		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
392	6.47E-14	118398387	ref	YP_001031522.1	AhpC/TSA family protein	Tetrahymena thermophila SB210		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		89288682	gb	EAR83859.1	AhpC/TSA family protein	Tetrahymena thermophila SB210		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
393	0	46445658	ref	YP_007023.1	probable proteins related to alkyl hydroperoxidase reductase	Candidatus Protochlamydia amoebophila UWE25		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		46399299	emb	CAF2748.1	probable proteins related to alkyl hydroperoxidase reductase	Candidatus Protochlamydia amoebophila UWE25		group 2	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
394	1.63E-16	78062802	ref	YP_372710.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Burkholderia sp. 383		group 3	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		77970687	gb	ABB12066.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Burkholderia sp. 383		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
395	0	54298241	ref	YP_124610.1	hypothetical protein Ipp2299	Legionella pneumophila str. Paris		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		53752026	emb	CAH13452.1	hypothetical protein	Legionella pneumophila str. Paris		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
396	0	15054517	gb	AAK82654.1	AF205887, 1 peroxidoxin 1	Leishmania donovani		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		68235779	gb	AAV88226.1	peroxidoxin/thiol-specific antioxidant	Leishmania donovani		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
397	0	32267043	ref	NP_861075.1	alkyl hydroperoxidase reductase 1 sea	Helicobacter hepaticus ATCC 51449		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		32263095	gb	AAFP78141.1	alkyl hydroperoxidase reductase 1 sea	Helicobacter hepaticus ATCC 51449		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
398	0	2829687	sp	P80602	BAST, WHEAT 2-Cys peroxidoreductin BAS1, chloroplas	Triticum aestivum		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		18053511	dbj	BAA19099.1	Thiol-specific antioxidant protein	Triticum aestivum		group 2	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
399	0	114651081	ref	YP_749221.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella frigidimarina NCIMB 400		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		114333001	gb	ABI70383.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	Shewanella frigidimarina NCIMB 400		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
400	0	3603241	gb	AAAC3544.1	type II peroxidoxin 1	Mus musculus		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
401	3.11E-16	88795270	ref	YP_01110969.1	Peroxiredoxin	Asteromonas macleodii 'Deep ecotype'		group 2	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		88773392	gb	EAR04658.1	Peroxiredoxin	Asteromonas macleodii 'Deep ecotype'		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
402	0	17224953	gb	AAJ37182.1	AF320771, 1 tyrosine peroxidase	Trypanosoma cruzi		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
403	4.33E-14	165897429	gb	EDR24593.1	hypothetical protein, conserved	Entamoeba dispar SAW760		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
404	5.79E-14	165904391	gb	EDR29619.1	hypothetical protein, conserved	Entamoeba dispar SAW760		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
405	0	147906188	ref	NP_001086130.1	MGC83969 protein	Xenopus laevis		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG
		49259209	gb	AAH14236.1	MGC83969 protein	Xenopus laevis		group 1	FFYPDLDFTFVCPTEVSGVSSHAWIQTPRQGGIGEGVALRG

406	0	15131688	emb	CAC48323.1	2-Cys peroxiredoxin	<i>Pisum sativum</i>	group 1	FFYPLDFTFVCPTEVSVSHLAWVQSDRSRGGGLGVLLQGIALLRG
407	1.29E-09	11467494	ref	NP_043640.1	ORE24, ORE24, ODO51 Putative peroxiredoxin yd42 (Thioredoxin)	<i>Odonella sinensis</i>	outlier	FFYPANFAISPTSEISVSHLQYLQVLCNREGGLEVLTEGLAFPG
		13517689	emb	E49537	YCF42, ODO51 Putative peroxiredoxin yd42 (Thioredoxin)	<i>Odonella sinensis</i>		
		1185189	emb	CA9A9187.1	ORF204, homologous to Forphyra ORF199	<i>Odonella sinensis</i>		
408	2.48E-16	107028623	ref	YP_6247.34.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia cenocepacia AU 1054		group 2	VFPADFTFVCPTEVSTTHKAWHDTSDVLLIEGMALRGDNGIG
		116892187	ref	YP_8247.34.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia cenocepacia HI2424			
		11871370	ref	ZP_01566333.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia cenocepacia MC0-3			
		105895997	gb	ABE719.16.1.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia cenocepacia AU 1054			
		116850187	gb	ABK10827.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia cenocepacia HI2424			
		118648681	gb	EA9595483.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Burkholderia cenocepacia MC0-3			
409	0	60280341	gb	AA818168.1	tryparedoxin peroxidase 1	<i>Leishmania guyanensis</i>	group 1	FFYPLDFVCPTECSMAHLQWLTQERKGGGLGVLDKGVAYVRG
410	0	156550783	ref	XP_016006643.1	PREDICTED: similar to peroxiredoxins, prx-1, prx-2	<i>Nasonia vitripennis</i>	group 1	VLLFFYPDLDFVCPTEVSDTHLAWINTPREGGGLGHLTLRA
411	0	56754497	gb	AAW254336.1	SJCHGC01281 protein	<i>Schistosoma japonicum</i>	group 1	FFYPLDFTFVCPTEVSTHAWINTPREGGGLGLGVALRGVLR
		60279645	gb	BAD90103.1	thioredoxin peroxidase-3	<i>Schistosoma japonicum</i>		
412	0	157752180	ref	ZP_001679802.1	Hypothetical protein CBG02380	<i>Caenorhabditis briggsae</i> AF16	group 1	CSITFFYPDLDFVCPTEVSHLAWINQPRHGGGLGVLDKGIARFRG
		39598861	emb	CAE95088.1	Hypothetical protein CBG02380	<i>Caenorhabditis briggsae</i>		
413	0	60835754	gb	AA337153.1	peroxiredoxin 2	synthetic construct	group 1	FFYPLDFTFVCPTEVSVHLAWINTPREGGGLGVLDKGIAYVRG
414	0	157366930	ref	XP_001682020.1	tryparedoxin peroxidase	<i>Leishmania major</i>	group 1	FFYPLDFSVCPTEDSVLAAHLQWLTQDRKGGGLGGVAYVRG
		157466938	ref	XP_001682024.1	tryparedoxin peroxidase	<i>Leishmania major</i>		
		157268948	ref	XP_001682028.1	tryparedoxin peroxidase	<i>Leishmania major</i>		
		68125475	emb	CAJ033332.1	tryparedoxin peroxidase	<i>Leishmania major</i>		
		68125479	emb	CAJ03340.1	tryparedoxin peroxidase	<i>Leishmania major</i>		
415	8.39E-14	123475148	ref	XP_001320753.1	AhpC/TSA family protein	<i>Trichomonas vaginalis</i> G3	group 1	FSYPLDFTFVCPTECSVHNAWAMTRDGGIGEGEHCILRGVLIH
		123903565	gb	EA908530.1	AhpC/TSA family protein	<i>Trichomonas vaginalis</i> G3		
416	0	118077413	ref	ZP_01539608.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Shewanella woodyi ATCC 51608	<i>Shewanella woodyi</i> ATCC 51608	group 2	FFYPADFTFVCPTEVSTTHKAWHDAWVMDIAGLALRGDLGIG
		118024088	gb	EA937897.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Shewanella woodyi ATCC 51608			
417	0	119559781	gb	EA949396.1	peroxiredoxin 3, isoform CRA_a	<i>Home sapiens</i>	group 1	FFYPLDFTFVCPTEVSVHLAWINTPRNGGLGVLLSGLALRG
418	0	19698783	gb	AA191102.1	thioredoxin peroxidase	<i>Acanthocheilium vitaceae</i>	group 1	FFYPLDFTFVCPTECSVSHLAWINTDRMGGGLGVLDKGIAYVRG
419	0	162690842	gb	ED072702.1	predicted protein	<i>Physcomitrella patens</i> subsp. patens	group 1	FFYPLDFTFVCPTEVSTHAWINTDRAGGLGVLLQGIAYVRG
420	0	53759099	gb	AAU93339.1	antioxidant	<i>Aeromonas hydrophila</i>	group 1	VLGFYPLDFTFVCPSEVSHNAWRNTKIDGGIGAGVAFRRG
421	0	126647203	ref	ZP_01719713.1	putative thioredoxin peroxidase	<i>Algoriphagus</i> sp. PRI	group 4	FFYPKDFVCPTECSVTHLAWLMTPKVLAAPVAYRGNEGVA
		12657251	gb	EA281499.1	putative thioredoxin peroxidase	<i>Algoriphagus</i> sp. PRI		
422	2.82E-12	86157572	ref	YP_464357.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/Anaeromyxobacter dehalogenans 2CP-C		outlier	LSGLALFYPRDFTFVCPTEISVTHRRWEEKLEGVAAARVLE
		85774083	gb	ABC80920.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/Anaeromyxobacter dehalogenans 2CP-C			
423	0	88794998	ref	ZP_01110699.1	antioxidant, AhpC/Tsa family protein	<i>Alteromonas macleodii</i> 'Deep ecotype'	group 1	VLVFFYPLDFTFVCPSEVSHNAWRNTPVQGGIGDGVAFRRG
		88737228	gb	EAR04890.1	antioxidant, AhpC/Tsa family protein	<i>Alteromonas macleodii</i> 'Deep ecotype'		
424	1.94E-11	152981222	ref	YP_001351729.1	alkyl hydroperoxide reductase subunit C	<i>Janthinobacterium</i> sp. Marseille	group 2	IFMPPAAFTNFCPTESHKVVWHETSPYKGEGLSLRQDGVKIVSE
		151281299	gb	ABR89709.1	alkyl hydroperoxide reductase subunit C	<i>Janthinobacterium</i> sp. Marseille		
425	0	78184723	ref	YP_377158.1	thioredoxin peroxidase	<i>Synechococcus</i> sp. CC9902	group 1	FFYPLDFTFVCPTEVLGVDSSHLVWIGTARQGGGLGEGVALRG
		78169017	gb	ABB26114.1	thioredoxin peroxidase	<i>Synechococcus</i> sp. CC9902		
426	1.96E-17	118399118	ref	XP_001031885.1	AhpC/TSA family protein	<i>Tetrahymena thermophila</i> SB210	group 1	VLAVFPEDFTYVCPTEITTHLAWIKTPREGGIVGYGAALRG
		89286220	gb	EAR84222.1	AhpC/TSA family protein	<i>Tetrahymena thermophila</i> SB210		
427	0	85058620	ref	YP_454322.1	putative peroxidase	<i>Sodalis glossinidius</i> str. 'morisitans'	group 1	VLVNLKFFVPMDFTFVCPSEVHNAWRVPTKGGIGAGVALRG
		84779140	gb	BAE73917.1	putative peroxidase	<i>Sodalis glossinidius</i> str. 'morisitans'		
428	0	138894584	ref	YP_001125037.1	2-cys peroxiredoxin	<i>Geobacillus thermodenitrificans</i> NG380-2	group 1	NMKFFYPLDFVCPTEVSTSHKAWMNVPRONGIGEGVALRG
		134268097	gb	ABO6292.1	2-cys peroxiredoxin	<i>Geobacillus thermodenitrificans</i> NG380-2		
429	1.24E-15	159109131	ref	XP_001704832.1	Peroxioredoxin 1	<i>giardia lamblia</i> ATCC 50803	group 1	ISVLTFFYPADFTFVCPSESHHAWCLQNKDGGIGMGLALRA
		157432905	gb	ED077158.1	Peroxioredoxin 1	<i>giardia lamblia</i> ATCC 50803		
430	9.18E-14	145698441	gb	BAF57015.1	peroxiredoxin	<i>Entamoeba nutilali</i>	group 1	RIKAFKFINLFYPLDWTFCYPTCEQLKYSVKGGVGGAGISRRR
431	0	157369301	ref	YP_001477290.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Serratia proteamaculans 568		group 1	VLVFFWPMDFTFVCPSEVFNHNRKTPVNGGIGAGVALRG
		157321065	gb	ABV40162.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Serratia proteamaculans 568			
432	0	152969221	ref	YP_001334330.1	alkyl hydroperoxide reductase, C22 subunit, thioredoxin	<i>Klebsiella pneumoniae</i> subsp. pneumoniae MGH 78578	group 2	FFYPADFTFVCPTEVSTTHKAWHSSSEEGADRAAEGVGVK
		150954070	gb	ABR176100.1	alkyl hydroperoxide reductase, C22 subunit, thioredoxin	<i>Klebsiella pneumoniae</i> subsp. pneumoniae MGH 78578		
433	2.83E-16	45190914	ref	NP_985168.1	AER312WP	<i>Ashbya gossypii</i> ATCC 10895	group 1	VSLAFIPLAFVCPTESSLAWNTNIARDGGGLVLIIEGIALRG
		44983992	gb	AA552992.1	AER312WP	<i>Ashbya gossypii</i> ATCC 10895		
434	0	2499471	sp	O90384	TDX_CYNYP Peroxioredoxin (Thioredoxin peroxidase)	<i>Cynops pyrrhogaster</i>	group 1	FFYPLDFTFVCPTEVSDCHLAWTNTSREGGGLGVLDKGIISFRG
		520853	gb	BAAG7054.1	animal blastomere protein	<i>Cynops pyrrhogaster</i>		
435	0	148263398	ref	YP_001230104.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Geobacter uranireducens R4		group 1	ISSFFYPLDFTFVCPTEVSHLAWIKRQDNLKEGVALRGQKTLG
		146396898	gb	ABG25531.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Geobacter uranireducens R4			
436	0	145588858	sp	G9C9R8	BAS1B_ARATH 2-Cys peroxiredoxin BAS1-like, chloroArabidopsis thaliana		group 1	VLLFFYPDLDFVCPTEVSVSHLAWVQIDRSRGGGLGGGIALRG
		9758409	gb	BAB08951.1	2-cys peroxiredoxin-like protein	<i>Arabidopsis thaliana</i>		
437	0	27806083	ref	NP_776857.1	Peroxioredoxin 3	<i>Bos taurus</i>	group 1	FFYPLDFTFVCPTEVSVHLAWINTPRNGGLGVLLPLGALRG
		2507170	sp	P35705	PRDX3_BOVIN Thioredoxin-dependent peroxidase reductase	<i>Bos taurus</i>		
		1127071	gb	BAA11511.1	antioxidant protein	<i>Bos taurus</i>		
		74267970	gb	AAU03010.1	Peroxioredoxin 3	<i>Bos taurus</i>		
438	0	146088967	ref	XP_001465682.1	peroxiredoxin	<i>Leishmania infantum</i> JPCM5	group 1	FFYPMDFTFVCPTEVSCSHLAWNTNTPRKGGGLGVLASGIALRG
		16751316	gb	AA125846.1	putative mitochondrial peroxiredoxin	<i>Leishmania infantum</i>		
		134069782	emb	CAM68108.1	peroxiredoxin, tyrosine oxidase	<i>Leishmania infantum</i>		
439	0	15609565	ref	NP_216944.1	ALKYL HYDROPEROXIDE REDUCTASE C PROTE1	<i>Mycobacterium tuberculosis</i> H37Rv	group 3	LLTIGFWPKDFTFVCPTEVSHAHQVWRAGHNDGVADRVLID
		15841949	ref	NP_336986.1	alkyl hydroperoxide reductase C	<i>Mycobacterium tuberculosis</i> CDC1551		





458	1.75E-15	62186548	ref	YP_220333.1	putative alkyl hydroperoxide reductase	<i>Chlamydomonas</i> S26/3		group 4	FFYPKDFTVCPTECSVTHQRWLKTDKAGGVKVLDSGLSFRG
459	1.40E-12	62148615	emb	CAH64387.1	putative alkyl hydroperoxide reductase	<i>Chlamydomonas</i> S26/3		group 1	MFVPLAFVCPTEILKXWTFQPTIEGGLGYSVMVLLAGHSIRG
460	1.74E-19	163770889	gb	ED_084566.1	predicted protein	<i>Monosiga brevicollis</i> MX1		group 2	VLKVFYPADFTVCPTEVSTSHKAWHDISPGLADRGAEIG
461	1.90E-17	71728247	gb	EAO304.30.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Xyella fastidiosa</i> Amn-1		group 1	VLVVFYPLDFTVCPSESVTHNAWRNTPIDGGIGGGMFRG
462	3.27E-14	94995256	ref	YP_603354.1	peroxiredoxin	<i>Streptococcus pyogenes</i> MGAS10750		group 2	CFYPADFSVCPTEVSTVHKAWHDDSDVLDGDLAQRGADGIG
463	0	65307457	ref	NP_0011016478.2	Peroxiredoxin 3	<i>Danio rerio</i>		group 1	VSVFFYPLDFTVCPTEVTHLAWTNTIPRSGGI GVLPLGIALRG
464	0	62204368	gb	AAH92846.1	Peroxiredoxin 3	<i>Danio rerio</i>		group 1	VLVVFYPLDFTVCPTEVSTVSHYKWRNTPVDVGGDSIALRA
465	0	58534270	ref	YP_00374018.1	antioxidant, AhpC/Tsa family, antioxidant, AhpC/Tsa family,	<i>Wolbachia endosymbiont of Drosophila ananassae</i>		group 1	FFYPLDFTVCPTEVSTVHLAWINTPREGGLGVLKEGIAYVRG
466	0	12846252	dbi	BAB27093.1	unnamed protein product	<i>Mus musculus</i>		group 1	FFYPLDFTVCPTEVSTVHLAWINTPREGGLGVLKEGIAYVRG
467	0	33591156	gb	AAQ23082.1	thioredoxin peroxidase	<i>Ixodes ricinus</i>		group 1	VSTFFYPLDFVCPTEVLAHLAWINTKLGSGVGEISLRG
468	0	115844435	ref	XP_786503.2	PREDICTED: similar to thioredoxin peroxidase	<i>Strongyloides purpuratus</i>		group 1	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
469	0	15958268	ref	XP_001176440.1	PREDICTED: similar to thioredoxin peroxidase	<i>Strongyloides purpuratus</i>		group 1	FFYPLDFTVCPTEVSTVHLAWIQTPREGGGVNLNDGADRGR
470	0	5762303	gb	AADE1093.1	AF128226_1 thioredoxin peroxidase homolog	<i>Giardia intestinalis</i>		group 1	ISSFFYPLDFTVCPTEVSLGSLAWVWQTPDRSGGLGGIALRG
471	0	7879328	ref	YP_397440.1	thioredoxin peroxidase	<i>Prochlorococcus marinus</i> str. MIT 9312		group 1	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
472	9.69E-21	116075930	ref	YP_588430.1	thioredoxin peroxidase [px1]	<i>Prochlorococcus marinus</i> str. MIT 9312		group 1	FFYPLDFTVCPTEVSTVHLAWIQTPREGGGVNLNDGADRGR
473	0	46580652	ref	YP_966442.1	alkyl hydroperoxide reductase/Thiol specific antioxidant, AhpC/Tsa family	<i>Desulfovibrio vulgaris</i> subsp. <i>vulgaris</i> str. <i>Hildenborough</i>		group 1	ISSFFYPLDFTVCPTEVSLGSLAWVWQTPDRSGGLGGIALRG
474	0	162146596	ref	YP_001601055.1	putative alkyl hydroperoxide reductase subunit C	<i>Desulfovibrio vulgaris</i> subsp. <i>vulgaris</i> str. <i>Hildenborough</i>		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
475	0	227765336	dbi	CACP54717.1	putative alkyl hydroperoxide reductase subunit C	<i>Desulfovibrio vulgaris</i> subsp. <i>vulgaris</i> str. <i>Hildenborough</i>		group 1	FFYPLDFTVCPTEVSTVHLAWIQTPREGGGVNLNDGADRGR
476	7.02E-14	145698439	dbi	BAE57014.1	peroxiredoxin	<i>Enhanoeba nutalli</i>		group 1	FFYPLDFTVCPTEVSTVHLAWIQTPREGGGVNLNDGADRGR
477	0	78223919	ref	YP_385666.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Geobacter metallireducens</i> GS-15		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
478	0	70730759	ref	YP_260500.1	alkyl hydroperoxide reductase, subunit C	<i>Geobacter metallireducens</i> GS-15		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
479	0	116187080	ref	YP_01476970.1	hypothetical protein VEX2w_02000446	<i>Vibrio</i> sp. Ex25		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
480	2.80E-14	22537972	ref	NP_688823.1	alkyl hydroperoxide reductase, subunit C	<i>Streptococcus agalactiae</i> 2603/R		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
481	0	87122593	ref	YP_01078471.1	alkyl hydroperoxide reductase, subunit C	<i>Streptococcus agalactiae</i> 18RS21		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
482	1.29E-17	149180982	ref	YP_01859483.1	alkyl hydroperoxide reductase C22 protein	<i>Marrimononas</i> sp. MED121		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
483	3.52E-15	148322428	gb	EDK67678.1	AhpC	<i>Bacillus</i> sp. SG-1		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
484	0	123993847	gb	ABM84525.1	peroxiredoxin 4	<i>synthetic construct</i>		group 1	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
485	0	147789752	emb	CAN67408.1	hypothetical protein	<i>Vitis vinifera</i>		group 1	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
486	0	94500891	ref	YP_01307417.1	alkyl hydroperoxide reductase c22 protein	<i>Oceanobacter</i> sp. RED65		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
487	0	144898700	emb	EAM11992.1	alkyl hydroperoxide reductase c22 protein	<i>Oceanobacter</i> sp. RED65		group 2	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
488	0	118746767	ref	YP_01594666.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Geobacter lovleyi</i> SZ		group 1	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG
489	0	118680310	gb	EAIV86789.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Geobacter lovleyi</i> SZ		group 1	VDVLKFAKRSDFEYPLDFTFVCPSEEGGIGVLVAGIALRG

489	0	126173967	ref	YP_001050116.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella baltica OS155	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPVKGGIGAGVAFRRG
		153000259	ref	YP_001365940.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella baltica OS185		
		60874892	ref	YP_001554208.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella baltica OS195		
		125997172	gb	ABN61247.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella baltica OS185		
		151364877	gb	ABS07877.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella baltica OS185		
		160860414	gb	ABX48948.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella baltica OS185		
490	0	121532845	ref	ZP_01664688.1	putative alkyl hydroperoxide reductase (subunit c) oxidoreductase	Ralstonia pickettii 121	group 3	FFYPKDFVCPTEVLGKLAWRREHKAGVALRAVSNRAVIG
		121300790	gb	EAx41768.1	putative peroxiredoxin ynf42	Ralstonia pickettii 121		
491	3.39E-12	118411118	ref	YP_874512.1	putative peroxiredoxin ynf42	Thalassiosira pseudonana	outlier	FFYPANFTVSPTEVSIHLSQSLLSIREGGLAVTEGLGIPG
		116739865	gb	ABK20735.1	putative peroxiredoxin ynf42	Thalassiosira pseudonana		
492	0	150006768	ref	YP_001301511.1	thioredoxin peroxidase	Parabacteroides distasonis ATCC 8503	group 4	FFYPMDFTFCVPTCEVSVHFRAWL NQDKKGGIHLVLANPVAVRG
		149835192	gb	ABR41889.1	thioredoxin peroxidase	Parabacteroides distasonis ATCC 8503		
493	0	61619736	gb	AAx47423.1	mitochondrial tripeptide peroxidase	Leishmania amazonensis	group 1	FFYPMDFTFCVPTCEVSVSHLAWNTPRKGGLGLVLAASGIALRG
494	0	57903631	gb	AAW68116.1	peroxiredoxin	Leishmania amazonensis	group 1	FFYPDLFTFCVPTCEVSHLAWTQQDRAGGLGVSTSHLTPAVDK
495	0	114690163	ref	XP_521289.2	peroxiredoxin	Pan troglodytes	group 1	FFYPDLFTFCVPTCEVSHLAWNTPRNGGLGVLLSGLAIRG
		114690185	ref	XP_001142221.1	PREDICTED: similar to Aop1 Human, MERS/Aop1	Pan troglodytes		
		6320661	ref	NP_010747.1	Stress inducible cytoplasmic thioredoxin peroxidase	Saccharomyces cerevisiae	group 1	AFVPLAFSFCVPTESLAWNTLPRDGGGLGVLEIGIALRGLSV
496	2.34E-15	2499475	sp	Q04120	Ynf453cp; CAI: 0.27	Saccharomyces cerevisiae	group 1	
		927720	gb	AA864886.1	cTPXII	Saccharomyces cerevisiae YJM789		
		151942418	gb	EDN60774.1	putative alkyl hydroperoxide reductase subunit	Plesiocystis pacifica SIR-1	group 1	VLAFFYPLDFTFCVPSSEVSVTHAAWRNTPSLDGGIGDGVVALRA
497	0	149916927	ref	ZP_01907413.1	putative alkyl hydroperoxide reductase subunit	Plesiocystis pacifica SIR-1	group 1	
		149820301	gb	EDM79718.1	putative alkyl hydroperoxide reductase subunit	Plesiocystis pacifica SIR-1		
498	0	123966166	ref	YP_001011247.1	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9515	group 1	FFYPDLFTFCVPTCEVSVCHLAWIQTPREGGIGVILNDGEADRGG
		123200532	gb	ABM72140.1	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9515		
499	0	90994464	ref	YP_536994.1	hypothetical protein 199	Porphyra yezoensis	group 1	FFYPDLFTFCVPTCEVLDVSDSSHLAWLQIDRSGGGLDGVVALRG
		122226821	sp	Q1XDL4	Ynf42; PORTE Putative peroxiredoxin ynf42 (Thioredoxin peroxidase)	Porphyra yezoensis		
		90819028	tbl	BAE92397.1	unnamed protein product	Porphyra yezoensis		
		7416016	tbl	BAE93646.1	peroxiredoxin	Entamoeba dispar	group 1	LFYPLDWTFCVPTTEQLKVSVCVHQAWCEADKGGVGTGYSRRRG
500	4.40E-14	152968927	ref	YP_001334036.1	putative thiol-alkyl hydroperoxide reductase	Klebsiella pneumoniae subsp. pneumoniae MGH 78578	group 1	VLVFFWPMDFTCVPSSEVSVHNAWRNTPVQGGIGEGVALRGYSS
501	0	150953776	gb	ABR75806.1	putative thiol-alkyl hydroperoxide reductase	Klebsiella pneumoniae subsp. pneumoniae MGH 78578	group 1	
502	0	58039776	ref	YP_191740.1	Alkyl hydroperoxide reductase subunit C	Glucobacter oxydans 621H	group 2	FFYPADFTFCVPTCEVSTTHKAWHDTPVLVLAIDRAGAGGVG
		58002190	gb	AAW61084.1	Alkyl hydroperoxide reductase subunit C	Glucobacter oxydans 621H		
503	0	158422675	ref	YP_001523967.1	alkyl hydroperoxide reductase	Azorhizobium caulinodans ORS 571	group 3	MLGIGSFVFPKDFTCVPTCEVTKLAWRRDHKGGVAVRYVLK
		158329564	tbl	BAE87049.1	alkyl hydroperoxide reductase	Azorhizobium caulinodans ORS 571		
504	0	149889640	ref	XP_001493666.1	PREDICTED: similar to antioxidant protein isoform 1	Equus caballus	group 1	FFYPDLFTFCVPTCEVSVHAWNTPRNGGLGVLLAGLALRG
505	0	2352262	gb	AA868796.1	peroxiredoxin-1	Drofilaria immitis	group 1	FFYPDLFTFCVPTCEVSHLAWNTPRNGGLGVLLAGLALRG
506	4.30E-16	50843436	ref	YP_056663.1	alkyl hydroperoxide reductase C22 protein	Propionibacterium acnes KPA171202	group 2	FFYPGDFTCVPTCEVSTVHKAWHADSDVKGAGDAPRAAEGIG
		50841038	gb	AAE83705.1	alkyl hydroperoxide reductase C22 protein	Propionibacterium acnes KPA171202		
507	4.19E-14	67464646	ref	XP_648522.1	peroxiredoxin	Entamoeba histolytica HM-1:IMSS	group 1	RIKAFKFINLFYPLDWTFCVPTTEQLKVSVKGGVAGIARRG
		540092	sp	P19476	CR29 ENT1H Putative peroxiredoxin (Thioredoxin peroxidase)	Entamoeba histolytica		
		399674	emb	CAA50324.1	alkyl hydroperoxide reductase	Entamoeba histolytica		
508	3.66E-18	91090021	ref	XP_967356.1	PREDICTED: similar to CG5826-PA	Triptolium castaneum	group 1	VFYPLDFTFCVPTCEVSHLAWNTPRNGGLGVLLAGLALRG
509	0	47837782	ref	NP_001085178.1	hypothetical protein LOC432282	Xenopus laevis	group 1	VMPISFFYPLDFTFCVPTTECHLAWINPREGGLGEGVSFRFG
		47837782	ref	AAH72351.1	MGC83501 protein	Xenopus laevis		
510	2.73E-22	62026740	gb	AAH92102.1	MGC83501 protein	Xenopus laevis	group 1	VSTVYPLDFTFCVPTTECHLAWNTPRQGGGLVLLGHTLRLG
		115899653	ref	XP_784460.2	PREDICTED: similar to thioredoxin peroxidase	Strongylocentrotus purpuratus		
		1158972635	ref	XP_001177358.1	PREDICTED: similar to thioredoxin peroxidase	Strongylocentrotus purpuratus		
511	5.48E-12	54650156	tbl	BAE66880.1	peroxiredoxin	Entamoeba mooshkovskii	group 1	VSTLYPLDWSVCPTEVLCGHOAWCETEKNGGVGAGISRRRG
512	0	42523944	ref	NP_969324.1	alkyl hydroperoxide reductase, C22 subunit	Bdellovibrio bacteriovorus HD100	group 2	FFYPADFTFCVPTCEVSTTHKAWHADSEEGLAYRGLVADNIG
		39576151	emb	CAE80317.1	alkyl hydroperoxide reductase C22	Bdellovibrio bacteriovorus HD100		
513	0	34850275	emb	CAE47413.1	alkyl hydroperoxide reductase C22	Helicobacter pylori	group 1	FFWPKDFTCVPTCEVSVHAWNTPKVGIGEGEALRGNMK
514	0	160940362	ref	ZP_02087707.1	hypothetical protein CLOBOL_05252	Clostridium bolleae ATCC BAA-613	group 2	NRTIGFYPADFTFCVPTCEVSYVHKAWADADSVLDAGQAFRRG
		158436942	gb	EDP14709.1	hypothetical protein CLOBOL_05282	Clostridium bolleae ATCC BAA-613		
515	0	73998671	ref	XP_5350331.2	PREDICTED: similar to Thioredoxin-dependent peroxidase	Canis familiaris	group 1	FFYPDLFTFCVPTCEVSHLAWNTPRNGGLGVLLPGIALRG
516	5.38E-14	165903197	gb	EDR28835.1	Thioredoxin protein, conserved	Entamoeba dispar SAW760	group 1	LFYPLDWTFCVPTTEQLKVSVCVHQAWCEADKGGVGTGYSRRRG
517	0	7963723	gb	AAE71324.1	AF250193_1 natural killer cell enhancement factor	Oncorhynchus mykiss	group 1	FFYPDLFTFCVPTTECHLAWNTPRNGGLGISTVLEKGIAYVRG
		7963725	gb	AAE71325.1	AF250194_1 natural killer cell enhancement factor	Oncorhynchus mykiss		
		7963728	gb	AAE71326.1	AF250195_1 natural killer cell enhancement factor	Oncorhynchus mykiss		
		7963730	gb	AAE71327.1	AF250196_1 natural killer cell enhancement factor	Oncorhynchus mykiss		
518	7.85E-14	15923371	ref	NP_370905.1	alkyl hydroperoxide reductase subunit C	Staphylococcus aureus subsp. aureus Mu50	group 2	CFYPADFVFCVPTCEVSTVHKAWHDHSDVLDITGLAQRGADGIG
		15926092	ref	NP_373615.1	alkyl hydroperoxide reductase subunit C	Staphylococcus aureus subsp. aureus N315		
		12182086	ref	NP_645174.1	alkyl hydroperoxide reductase subunit C	Staphylococcus aureus subsp. aureus MW2		
		49482631	ref	YP_039865.1	alkyl hydroperoxide reductase subunit C	Staphylococcus aureus subsp. aureus MRSAA252		
		49482626	ref	YP_042482.1	alkyl hydroperoxide reductase subunit C	Staphylococcus aureus subsp. aureus MSSA476		
		57652639	ref	YP_185342.1	alkyl hydroperoxide reductase, C subunit	Staphylococcus aureus subsp. aureus COL		
		82750092	ref	YP_415833.1	alkyl hydroperoxide reductase subunit C	Staphylococcus aureus subsp. aureus RF122		
		87162200	ref	YP_493094.1	Alkyl hydroperoxide reductase subunit C	Staphylococcus aureus subsp. aureus USA300		
		88194163	ref	YP_498954.1	alkyl hydroperoxide reductase	Staphylococcus aureus subsp. aureus NGTC 8325		
		148268667	ref	YP_001245610.1	Peroxiredoxin	Staphylococcus aureus subsp. aureus JH9		
		150392913	ref	YP_001315588.1	Peroxiredoxin	Staphylococcus aureus subsp. aureus JH1		

151220584	ref	YP_001331406.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus str. Newman		
156978709	ref	YP_001440966.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus Mu3		
161506653	ref	YP_001157432.1	peroxidase subunit C	Staphylococcus aureus subsp. aureus USA300_TCH1516		
60386613	sp	Q6G091	Ahpc-STAAS Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus MSSA476		
60389638	sp	Q6GJ07	Ahpc-STAAR Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus MRSA252		
60391217	sp	P0A0B5	Ahpc-STAAM Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus MRSA252		
60391218	sp	P0A0B6	Ahpc-STAAM Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus Mu50		
60391219	sp	P0A0B7	Ahpc-STAAB Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus MW2		
60391228	sp	P99074	Ahpc-STAAN Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus NCTC 8325		
181659656	sp	Q3HIR5	Ahpc-STAAC Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus COL		
123722415	sp	Q2FJN4	Ahpc-STAAS Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus COL		
123768535	sp	Q2YVK2	Ahpc-STAAB Alkyl hydroperoxide reductase subunit	Staphylococcus aureus subsp. aureus USA300		
1916316	db	AA851151.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus		
13702026	dbj	BAB41593.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus N316		
14246149	dbj	BAB58943.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus Mu50		
21203522	dbj	BAB94222.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus MW2		
49240760	emb	CAG39422.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus MRSA252		
49243704	emb	CAG42129.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus MSSA476		
57286825	gb	AAW38919.1	alkyl hydroperoxidase reductase, C subunit	Staphylococcus aureus subsp. aureus COL		
82656623	emb	CAI80019.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus RF122		
87128174	gb	ABD22868.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus USA300_FPR3757		
87201721	gb	ABD29531.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus NCTC 8325		
147739936	gb	ABQ48234.1	Peroxiredoxin	Staphylococcus aureus subsp. aureus JH9		
149946366	gb	ABR51301.1	Peroxiredoxin	Staphylococcus aureus subsp. aureus JH1		
150373384	dbj	BAF66844.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus str. Newman		
156720844	dbj	BAF77261.1	alkyl hydroperoxidase reductase subunit C	Staphylococcus aureus subsp. aureus Mu3		
160367462	gb	ABX28433.1	peroxidase subunit C	Staphylococcus aureus subsp. aureus USA300_TCH1516		
165901235	gb	EDR27346.1	hypothetical protein, conserved	Entamoeba dispar SAM760		
90075488	dbj	BAE87424.1	unnamed protein product	Macaca fascicularis		LFYPLDWTFCVPTTEQLKVSVCHQAWCEADKGGVGTGYSRRG
32475263	ref	NP_868257.1	peroxidase 2	Rhodopirellula ballica SH 1		FFYPLDFTFCVPTTEVDSCHLAWINTPKGGGLGVLKEGISFRG
32445804	emb	CAD78535.1	peroxidase 2	Rhodopirellula ballica SH 1		VLVFFWPLDFTFCVPTTEVSTHILAWINTPREGGIGGGVALRG
124606949	ref	XP_001350554.1	thioredoxin peroxidase	Plasmodium falciparum 3D7		VTKLFYPLNYTFVCPTEISVSHLAWKNMIPKGGIGNSFALRG
13357166	gb	AAK20024.1	AF25978_1 thioredoxin peroxidase 2	Plasmodium falciparum		
23498667	gb	AAK36234.1	AEO14846_33 thioredoxin peroxidase	Plasmodium falciparum 3D7		
29654768	ref	NP_820460.1	antioxidant, AhpC/TSA family	Coxiella burnetii RSA 493		SLKAVISNDVFFWPKDFTFVCPTEGFEAVLGVDSGVAERA
153210454	ref	YP_019476296.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii MSU Goat O1771		
154708501	ref	YP_001422935.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii Dugway 5J108-111		
161830432	ref	YP_001597319.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii RSA 331		
165924160	ref	YP_02219992.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii RSA 334		
29542036	gb	AAO90974.1	antioxidant, AhpC/TSA family	Coxiella burnetii RSA 493		
120875127	gb	EA331751.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii MSU Goat O1771		
154355787	gb	ABS7249.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii Dugway 5J108-111		
161762299	gb	ABX79941.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii RSA 331		
165916399	gb	EDR35003.1	alkyl hydroperoxidase reductase AhpC	Coxiella burnetii RSA 334		
163762964	ref	YP_02170028.1	Peroxiredoxin	Bacillus selenitireducens MLS10		FFYPLDFTFCVPTTEVSTSHRWVTEMDRQKGGVGLDGLALRG
160356897	gb	EDP83546.1	Peroxiredoxin	Bacillus selenitireducens MLS10		FFYPLDFTFCVPTTECVSAVHTWRNTPRKGIGVLTGVVALRG
156986072	ref	XP_001161001.9	thioredoxin peroxidase-like protein	Babesia bovis T2Bo		
19479721	gb	EDO06451.1	thioredoxin peroxidase-like protein	Babesia bovis		
71066352	ref	YP_265079.1	putative alkyl hydroperoxidase reductase, subunit C	Psychrobacter arcticus 273-4		LFYPADFTFCVPTTEVSTTHKAWHDSSEVMIAGLAERAGGGIG
71039337	gb	AAZ19645.1	putative alkyl hydroperoxidase reductase, subunit C	Psychrobacter arcticus 273-4		
27366935	ref	NP_762462.1	Peroxiredoxin	Vibrio vulnificus CMCP6		NTTIKVLGFFYPADFTFCVPTTEVSTTHKAWHDSSEVMIAGLAERAGGGIG
27358502	db	AAO07452.1	AEO16809_214 Peroxiredoxin	Vibrio vulnificus CMCP6		
87308751	ref	YP_01090890.1	peroxidase 2	Blastopirellula marina DSM 3645		VLVFFYPLDFTFCVPTTECVSISHLAWRNTPRDGGIGGGIALLRG
87288462	gb	EAQ80357.1	peroxidase 2	Blastopirellula marina DSM 3645		
88858687	ref	YP_011333328.1	alkyl hydroperoxidase reductase subunit C	Pseudoalteromonas tunicata D2		FFYPADFTFCVPTTEVSTAHKAWHDSSEVMIAGLAERAGGGIG
88818913	gb	EAR28727.1	alkyl hydroperoxidase reductase subunit C	Pseudoalteromonas tunicata D2		
157366942	ref	XP_001682026.1	tryparedoxin peroxidase	Pseudoalteromonas tunicata D2		FFYPLDFTFCVPTTEVSTAHKAWHDSSEVMIAGLAERAGGGIG
157866950	ref	XP_001682030.1	tryparedoxin peroxidase	Leishmania major		FFYPLDFTFCVPTTEVSTAHKAWHDSSEVMIAGLAERAGGGIG
3411094	gb	AA331146.1	thiol specific antioxidant	Leishmania major		
68125477	emb	CAJ03338.1	tryparedoxin peroxidase	Leishmania major		
68125481	emb	CAJ03342.1	tryparedoxin peroxidase	Leishmania major		
77324178	ref	YP_341752.1	alkyl hydroperoxidase reductase subunit C (Alkyl hydroperoxidase reductase subunit C)	Pseudoalteromonas haloplanktis TABCP (6.574E-09)		VLGFFYPADFTFCVPTTEVSTTHKAWHDSSEVMIAGLAERAGGGIG
76877089	emb	CAI80306.1	alkyl hydroperoxidase reductase subunit C (Alkyl hydroperoxidase reductase subunit C)	Pseudoalteromonas haloplanktis TABCP (6.574E-09)		
1522994393	ref	YP_001339228.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Marinomonas sp. MWYL1		VLGFFYPADFTFCVPTTEVSTTHKAWHDSSEVMIAGLAERAGGGIG
150635317	gb	ABR89293.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Marinomonas sp. MWYL1		
56541226	gb	AAH86783.1	Prdx2 protein	Mus musculus		FFYPLDFTFCVPTTEVSTHAWINTPREGLGVLKEGIAYRG
153011153	ref	YP_001372367.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Ochrobactrum anthropi ATCC 49188		MLGIVSAFFYPKDFTFVCPTEVLGVKAWRRHDKGVAYRG
151563041	db	ABS16538.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Ochrobactrum anthropi ATCC 49188		
91788904	ref	YP_549856.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Oloronomas sp. JS666		VFYPADFTFCVPTTEVSTTHKAWHDSSEVMIAGLAERAGGGIG
91698129	gb	ABE44956.1	alkyl hydroperoxidase reductase/Thiol specific antioxidant	Oloronomas sp. JS666		
10767221	gij	S49173	hypothetical protein - barley (fragment)	Hordeum vulgare		FFYPLDFTFCVPTTEVSHLAWVQTERSGGLGVLIQIALLRG

538	6.07E-15	1455490333.ref	XP_001460196.1	hypothetical protein GSPAT10025534001	unnamed protein product	Paramacium tetraurelia strain d4-2	group 1	FFYPLDFTVCPTEVSVSHMKYCOIPRQGGGLVLIQVAFRG
539		124428026.emb	CAK922799.1	unannotated protein product	Paramacium tetraurelia		group 1	FFYPLDFTVCPTEVSVSHMKYCOIPRQGGGLVLIQVAFRG
540	0	149632365.ref	XP_001507865.1	PREDICTED: similar to proliferation associated gene	Ornithorynchus anatinus		group 1	WVFPKDFTFVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
541	0	582011189.gb	AAW66718.1	AhpC	Helicobacter pylori		group 1	VLVFFPLDFTVCPSEVSHNAWRNTAVNGGIGAGVAFRG
542	0	116214895.ref	XP_01481059.1	hypothetical protein VchoR_02003052	Vibrio cholerae MO10		group 1	NLKFYPMDFTFVCPSEVSHNAWRNTAVNGGIGAGVAFRG
543	0	32029501.ref	ZP_00132514.1	COG0450: Peroxiredoxin	Haemophilus somnus 2336		group 1	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
544	0	110768962.ref	XP_001122282.1	PREDICTED: similar to Peroxiredoxin-2 (Thioredoxin)	Apis mellifera		group 2	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
545	0	157775299.ref	XP_001665715.1	hypothetical protein CBG18073	Caenorhabditis briggsae AF16		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
546	1.89E-18	3759181.dbl	BAE43306.1	Hypothetical protein CBG18073	Caenorhabditis briggsae		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
547	0	29150183.emb	CAD76635.1	alkyl hydroperoxide reductase C	Amphibacillus xylanus		group 2	VFPADSEVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
548	0	157136394.ref	XP_001663718.1	peroxiredoxins; prx-1; prx-2; prx-3	Helicobacter pylori		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
549	7.82E-17	108869991.gb	EAT34216.1	peroxiredoxins; prx-1; prx-2; prx-3	Aedes aegypti		group 2	KGDILLVFPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
550	0	149635578.ref	XP_00150098.1	hypothetical protein DSY0524	Desulfitobacterium hafniense Y51		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
551	0	149267687.ref	XP_922530.2	PREDICTED: similar to peroxiredoxin 2	Desulfitobacterium hafniense DCB-2		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
552	1.36E-15	141082.sp	P28830	YNDH_BACYN Putative peroxiredoxin in ndh 5 region	Mus musculus		group 2	VSECFYPADFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
553	2.27E-12	121608079.ref	YP_998886.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Bacillus sp. (strain YN-1)		group 2	RGGKGSVIFMPAAFTFNCPTESHKWHETSPVKGEGALRGR
554	0	66821043.ref	XP_644052.1	peroxiredoxin	Verminephrobacter eiseniae EF01-2		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
555	0	28828367.gb	AAO51015.1	similar to Rattus norvegicus (Rat). Prx IV	Dicystostelium discoideum		group 2	NGAFKFFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
556	4.53E-12	149130507.gb	EDM21713.1	hypothetical protein BACCAC_00067	Bacteroides caecae ATCC 43185		group 2	WVSIFMPAAFTFNCPTESHKWHETSPVKGEGALRGR
557	0	107099130.ref	YP_788296.1	alkyl hydroperoxide reductase subunit C	Pseudomonas aeruginosa C3719		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
558	1.62E-16	161521039.ref	YP_001345612.1	peroxiredoxin	Pseudomonas aeruginosa 2192		group 2	VFPADSEVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
559	0	156710666.gb	ED051025.1	alkyl hydroperoxide reductase C22	Pseudomonas aeruginosa PACS2		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
560	0	83745900.ref	XP_00942957.1	alkyl hydroperoxide reductase subunit C	Pseudomonas aeruginosa UCBPP-PA14		group 2	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
561	0	83727590.gb	EAP74711.1	alkyl hydroperoxide reductase C22	Pseudomonas aeruginosa PA7		group 1	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
562	0	95931471.ref	ZP_01341474.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia multivorans ATCC 17616		group 1	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
563	8.55E-17	502828495.ref	XP_446677.1	unannotated protein product	Burkholderia multivorans ATCC 17616		group 1	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
564	0	119471587.ref	ZP_01614001.1	peroxiredoxin 2	Hydrogenobaculum sp. Y04AA51		group 3	YFYPKDFTFVCPTEVTVHAWARDEKLEIGIKTGLALRQGVGK
565	2.15E-11	25089582.sp	P72314	AHPC RHORU Alkyl hydroperoxide reductase	Raistonia solanacearum UW551		group 2	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
566	0	152992346.dbl	BAE71710.1	peroxiredoxin; AhpC/Isa family	Raistonia solanacearum UW551		group 1	FFYPADFTVCPTEVSVTHKAWHDADSVLRQGSADRAAEGIG
567	0	62896877.dbl	BAD96379.1	peroxiredoxin; 3 isoform a precursor variant	Sulfitobacterium hafniense DCB-2		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG
568	7.23E-19	9955007.pdb	1QMV	A Chain A, Thioredoxin Peroxidase B From Red Blood	Homo sapiens		group 1	FFYPLDFTVCPTEVSVHFAWNTPKQGGGLVLIQVAFRG

9955008	1QMV	B Chain B, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955009	1QMV	C Chain C, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955010	1QMV	D Chain D, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955011	1QMV	E Chain E, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955012	1QMV	F Chain F, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955013	1QMV	G Chain G, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955014	1QMV	H Chain H, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955015	1QMV	I Chain I, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
9955016	1QMV	J Chain J, Thiooxidase Peroxidase B From Red Blood	Homosapiens				
569	0	85374917 ref	YP_458979.1	alkyl hydroperoxide reductase (small subunit)	Erythrocyte filorialis HTCC2594	group 2	MGIIGFYPADFTFVCPTEVSTSHKAWHDITSEVLRVGLADRA
570	0	84789000 gb	ABC64.182.1	alkyl hydroperoxide reductase (small subunit)	Erythrocyte filorialis HTCC2594	group 1	VSFYPLDFTFVCPTEVTLGHQAWQVETDRNKGVVGAGISRGG
571	0	1482394.64 gb	YP_001224841.1	Peroxioredoxin, AhpC/TSA family	Synechococcus sp. WH 7803	group 1	FFYPLDFTFVCPTEVGLVDSHSLAWIQTPROGGI.GEGVALRG
571	5.49E-09	147847993 emb	CAN235544.1	Peroxioredoxin, AhpC/TSA family	Synechococcus sp. WH 7803	outlier	FFYPLDFTFVCPTEVGLVDSHSLAWIQTPROGGI.GEGVALRG
572	1.48E-14	149952158 gb	ABR90866.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Alkaliphilus metallireducens QYMF	group 1	FFYPLDFTFVCPTEVGLVDSHSLAWIQTPROGGI.GEGVALRG
572	0	546650152 gb	BAD66878.1	peroxiredoxin	Entamoeba muskovskii	group 1	VSTLFYPLDWTFVCPTEVILGCHQAWQVETDRNKGVVGAGISRGG
573	0	148708893 gb	EDI4.0843.1	peroxiredoxin A, isoform GRA_a	Mus musculus	group 1	VSTLFYPLDWTFVCPTEVILGCHQAWQVETDRNKGVVGAGISRGG
574	0	89072610 ref	YP_01159182.1	alkyl hydroperoxide reductase c22 protein	Photobacterium sp. SKA34	group 2	VLGGFYPADFTFVCPTEVTHLAWINTPQROGGI.GSHTLRGVL
		90581516 ref	YP_01237309.1	alkyl hydroperoxide reductase c22 protein	Vibrio angustum S14		
		89057174 gb	EAR87167.1	alkyl hydroperoxide reductase c22 protein	Photobacterium sp. SKA34		
		90437278 gb	EAS52476.1	alkyl hydroperoxide reductase c22 protein	Vibrio angustum S14		
575	0	29377215 ref	NP_816369.1	alkyl hydroperoxide reductase, C subunit	Enterococcus faecalis V583	outlier	VSTFFYPADFSFVCPTEVAHLQELNCEVNGQLAVLDSGMAVRA
		2353764 gb	AAAC46081.1	alkyl hydrogen peroxide reductase	Enterococcus faecalis V583		
		29344681 gb	AAO82439.1	alkyl hydroperoxide reductase, C subunit	Enterococcus faecalis V583		
576	2.40E-18	150205777 ref	YP_001296603.1	Probable peroxiredoxin	Flavobacterium psychrophilum J190286	group 4	NLKFYWPYKDFTFVCPTECDTVHFVFWVFLNTPKNGGIESVITFRA
		149772318 emb	CAL43796.1	Probable peroxiredoxin	Flavobacterium psychrophilum J190286		
577	4.40E-16	73984367 ref	XP_850180.1	PREDICTED: similar to Thiooxidase-dependent perox	Canis familiaris	group 1	FFYPLDFTFVCPTEVSVTHLAWNALONSLGLVLLPGLALRG
578	0	145357502 ref	XP_001422957.1	predicted protein	Ostreococcus lucimarinus CGE9901	group 1	FFYPLDFTFVCPTEVGLVDSHSLAWIQTPROGGI.GDGITALRG
		1445853201 gb	ABP01316.1	predicted protein	Ostreococcus lucimarinus CGE9901		
579	6.56E-14	217354 dbj	BAA00749.1	30,000-Mr antigen	Entamoeba histolytica	group 1	RKAKFKELNLYPLDWFVCPTEQLKYSYKGGVYGGVGIARRG
580	0	16331338 ref	NP_442086.1	thiol-specific antioxidant protein	Synechococcus sp. PCC 6803	group 1	FFYPLDFTFVCPTEVSHLAWIQTPROGGI.GAGIALRGVLR
		3123075 sp	O56624	Y755_SYN73 Putative peroxiredoxin sil0755 (Thioredo	Synechococcus sp.	group 2	VLDFVYPADFTFVCPTEVTHKAWADASDEGLALRGDNGIG
		1001510 dbj	BAA10136.1	alkyl-specific antioxidant protein	Synechococcus sp. PCC 6803	group 1	FFYPLDFTFVCPTEVSVSHLAWNTPKGGGL.GVLKEGISFRG
581	4.01E-16	18309764 ref	NP_561638.1	alkyl hydrogen peroxide reductase	Clostridium perfringens str. 13	group 1	FFYPLDFTFVCPTEVSVSHLAWVQTFRGGGLGLVLIQIAGLRG
		18144442 dbj	BAE80498.1	alkyl hydrogen peroxide reductase	Clostridium perfringens str. 13	group 1	VLVFFWPLDFTFVCPSEVSTHFAMRNTPVYKGGIEGVVALRA
582	0	606554321 gb	AAAZ59851.1	peroxiredoxin 1	Secale cereale	group 1	VLLFFYLDFTFVCRSEVSVTHNAWRNATVYKGGIAGVAFRA
583	0	3328221 gb	AAAC78473.1	thioredoxin peroxidase	Nitrocyclus mobilis Nb-231	group 1	YFYPLDFTFVCPSECVTHLAWKKTPLGGIGESVVALRVL
584	0	88811195 ref	YP_01126451.1	probable alkyl hydroperoxidase reductase	Nitrocyclus mobilis Nb-231	group 1	0
585	9.72E-19	88798850 ref	YP_01114432.1	probable alkyl hydroperoxidase reductase	Reinekea sp. MED297	group 1	
		88798330 gb	EAR09523.1	Peroxioredoxin	Reinekea sp. MED297	group 1	
586	0	68075607 ref	XP_679723.1	2-Cys peroxiredoxin	Plasmodium berghei strain ANKA	group 1	
		56500534 emb	CAN196544.2	2-Cys peroxiredoxin, putative	Plasmodium berghei	group 1	
587	0	440308 gb	AAA50465.1	enhancer protein	Homosapiens	group 1	
588	0	126273047 ref	XP_001367972.1	PREDICTED: similar to Ahp1 Human, MERE(Ahp1)	Monodelphis domestica	group 1	VITFFYPLDFTFVCPTEVSVSHLAWINTPSSRGGI.GPGLALRG
589	0	153888508 ref	ZP_02009650.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Raistonia pikeitii 12D	group 3	FFYPLDFTFVCPTEVGLVDSHSLAWIQTPROGGI.GAGIALRG
		151576028 gb	EDN39442.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Raistonia pikeitii 12D		
590	0	78485731 ref	YP_391656.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Thiomicrospira crunogena XCL-2	group 1	NLKFYPLDFTFVCPSEVSVTHNAWRNTPVYKGGIAGVADYL
		78364017 gb	ABB41982.1	AhpC/TSA family protein	Thiomicrospira crunogena XCL-2		
591	0	149744775 ref	XP_001501016.1	PREDICTED: similar to proliferation associated gene	Equus caballus	group 1	FFYPLDFTFVCPTECHLAWIKTPKGGI.RVLIKEGISFRGISV
592	2.08E-18	62738232 pbb	1WE0	A Chain A, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus	group 2	VFYPADFSFVCPTEVSVTHKAWIHNESVPLNITGLADRGADGIG
		62738233 pbb	1WE0	B Chain B, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738234 pbb	1WE0	C Chain C, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738235 pbb	1WE0	D Chain D, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738236 pbb	1WE0	E Chain E, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738237 pbb	1WE0	F Chain F, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738238 pbb	1WE0	G Chain G, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738239 pbb	1WE0	H Chain H, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738240 pbb	1WE0	I Chain I, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
		62738241 pbb	1WE0	J Chain J, Crystall Structure Of Peroxiredoxin (AhpC)	Amphibacillus xylanus		
593	0	91223047 ref	ZP_01256313.1	alkyl hydroperoxide reductase c22 protein	Vibrio alginolyticus 12G01	group 2	VLGGFYPADFTFVCPTEVSTTHKAWHDSSDGLADRAAEEIG
		153632563 ref	ZP_01985290.1	peroxiredoxin	Vibrio narveyi HY01		
		156975992 ref	YP_001446898.1	alkyl hydroperoxide reductase c22 protein	Vibrio narveyi ATCC BAA-11116		
		91191860 gb	EAS78123.1	alkyl hydroperoxide reductase c22 protein	Vibrio alginolyticus 12G01		
		148871149 gb	EDL70027.1	peroxiredoxin	Vibrio narveyi HY01		
		166527586 gb	ABL72671.1	hypothetical protein VB1HAR_04762	Vibrio narveyi ATCC BAA-11116		
594	0	21874312 ref	NP_662377.1	thioredoxin peroxidase	Chlorobium tepidum TLS	group 1	VLVFFYLDFTFVCPTECVSIFHWLNTPKRGGI.GSVALRG
		21647485 gb	JAAM72719.1	thioredoxin peroxidase	Chlorobium tepidum TLS		

Accession	Gene	Function	Organism	Group	Accession	Gene	Function	Organism	Group
595	0 885932.gb	peroxidase	Mus musculus	group 1					group 1
596	0 148544236.ref	Peroxioredoxin	Lactobacillus reuteri F275	group 2					group 2
597	0 148531330.gb	Peroxioredoxin	Lactobacillus reuteri F275	group 1					group 1
598	3.01E-13	thioredoxin peroxidase	Synechococcus sp. WH 7805	group 3					group 3
599	0 23500448.ref	peroxidase	Cytophaga hutchinsonii ATCC 33406	group 3					group 3
600	0 83269430.ref	AlpC, alkyl hydroperoxide reductase C	Brucella abortus biovar 1 str. 9.941						
601	0 154334622.ref	AlpC, alkyl hydroperoxide reductase C	Brucella abortus biovar 1 str. 9.941						
602	0 70942786.ref	2-Cys peroxiredoxin	Plasmodium chabaudi chabaudi	group 1					group 1
603	0 2498477.sp	BAS1, HORVU 2-Cys peroxiredoxin BAS1, chloroplast	Hordeum vulgare subsp. vulgare	group 1					group 1
604	1.78E-15	thioredoxin peroxidase	Cryptosporidium parvum Iowa II	group 1					group 1
605	0 126645720.ref	thioredoxin peroxidase-like protein	Cryptosporidium parvum Iowa II	group 1					group 1
606	3.12E-17	thioredoxin peroxidase-like protein	Cryptosporidium parvum Iowa II	group 3					group 3
607	1.45E-13	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Leishmania braziliensis	group 1					group 1
608	6.25E-17	cytosolic tyrosine peroxidase	Leishmania amazonensis	group 1					group 1
609	0 29150177.ref	alkyl hydroperoxide reductase C22 protein	Helicobacter pylori	group 1					group 1
610	0 1492847.ref	bas1 protein	Spinacia oleracea	group 1					group 1
611	0 157825578.ref	Thioredoxin peroxidase 1	Rickettsia akari str. Hartford	group 1					group 1
612	0 157825578.ref	Thioredoxin peroxidase 1	Rickettsia akari str. Hartford	group 1					group 1
613	7.84E-14	peroxiredoxin	Entamoeba nuttalli	group 1					group 1
614	1.19E-17	putative thioredoxin peroxidase	Leuvenhoekiella blandensis MED217	group 4					group 4
615	3.62E-14	hypothetical protein, conserved	Entamoeba dispar SAW760	group 1					group 1
616	8.47E-16	alkyl hydroperoxide reductase, C subunit	Clostridium perfringens ATCC 1312	group 2					group 2
617	0 110673878.gb	alkyl hydroperoxide reductase, C subunit	Clostridium perfringens ATCC 13124	group 1					group 1
618	0 157413379.ref	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9215	group 1					group 1
619	0 144898097.ref	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9215	group 2					group 2
620	0 125983536.ref	alkyl hydroperoxide reductase	Magnetospirillum gypthswaldense MSR-1	group 1					group 1
621	2.73E-23	thioredoxin peroxidase	Drosophila pseudoobscura	group 1					group 1
622	0 126684253.ref	alkyl hydroperoxide reductase C22 subunit	Trichomonas vaginalis G3	group 2					group 2
623	0 126684253.ref	alkyl hydroperoxide reductase C22 subunit	Trichomonas vaginalis G3	group 1					group 1
624	4.03E-14	peroxiredoxin	Bacillus sp. B14905	group 1					group 1
625	0 16608697.gb	thioredoxin peroxidase	Microcystis aeruginosa HM-1,IMS5	group 1					group 1
626	7.82E-17	alkyl hydroperoxide reductase/Thiol specific antioxidant	Methylobacillus flagellatus KT	group 1					group 1
627	2.86E-13	alkyl hydroperoxide reductase/Thiol specific antioxidant	Methylobacillus flagellatus KT	group 2					group 2
628	0 50897523.gb	putative thioredoxin peroxidase 1	Lactobacillus casei ATCC 334	group 1					group 1
629	0 29348221.ref	alkyl hydroperoxide reductase C22 protein	Bacteroides thetaiotaomicron VPI-5482	group 2					group 2
			Bacteroides thetaiotaomicron VPI-5482						

630	0	73977959	ref	XP_532599.2	PREDICTED: similar to peroxidoxin 1	Canis familiaris	group 1	FFYPLDFTVCPTEVSDSCHLAWINPKQGGVLKLGISFRG
631	0	71084310	gb	AAZ23600.1	peroxidoxin 1	Leishmania tropica	group 1	FFYPLDSEVCPTEVSDSVLAALHWLQWTLQDRKGGGLGGVAYRG
632	0	1258682408	gb	EAZ23339.1	hypothetical protein OsJ_008822	Oryza sativa (japonica cultivar group)	group 1	FFYPLDFTVCPTEVSDSHLAWVQTDPSGGGLVLLQGLALRG
633	0	38239164	tbl	BAD01572.1	thioredoxin peroxidase-1	Schistosoma japonicum	group 1	NLKFFYPADFTVCPTECSISHLAWTKQDRSGGLGEGNAFRG
634	1.26E-12	15872319	ref	NP_2668493.1	alkyl hydroperoxide reductase	Lactococcus lactis subsp. lactis I11403	group 2	VSDCFYPADFSVCPTEVHAAMHEHSDVLDAGLAQRGADGIG
635	0	54301411	gb	AAV33160.1	alkyl hydroperoxide reductase	Lactococcus lactis subsp. lactis I11403	group 1	FFWPKDFVCPTEVSHVFAWKNTPYKGGIGGEGALRGNMK
636	0	47027073	gb	AAV08751.1	2-cys peroxidoredoxin-like protein	Hyacinthus orientalis	group 1	LLTIGFWPKDFVCPTEVSLVGVHFNWRAQCHEDGADRAVSV
637	0	13375557	gb	AAK20392.1	hypothetical protein, conserved	Entamoeba dispar SAW760	group 3	LLTIGFWPKDFVCPTEVSLVGVHFNWRAQCHEDGADRAVSV
638	7.75E-14	165900263	gb	EDR26639.1	hypothetical protein, conserved	Entamoeba dispar SAW760	group 1	LLTIGFWPKDFVCPTEVSLVGVHFNWRAQCHEDGADRAVSV
639	0	71084308	gb	AAZ23599.1	peroxidoxin 1	Leishmania aethiopia	group 1	LIKAFKFMNLYFLPDWTFVCPTEQLKYSKVGSGVIGYSRRG
640	0	118029869	ref	XP_01500430.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phyatumum S1M815	group 1	FFYPLDSEVCPTEVSDSVLAALHWLQWTLQDRKGGGLGGVAYRG
641	1.69E-18	28198651	ref	NP_778965.1	subunit C of alkyl hydroperoxide reductase	Xylella fastidiosa Temecula1	group 3	YFYPKDFVCPTEVLLVKLAWRREHKFGDVKAGVALRAVSV
642	0	28056742	gb	AAO28614.1	subunit C of alkyl hydroperoxide reductase	Xylella fastidiosa Temecula1	group 2	VLNVFYPADFTVCPTEVSTSHKAWHDIPSGLADRGAEIG
643	0	148359891	ref	YP_001251098.1	hypothetical protein LPC_1819	Legionella pneumophila str. Corby	group 3	KATVAVSNFFWPKDFVCPTEVHLAWRNQHPQPEVQRAVLVD
644	0	148281664	gb	ABQ35752.1	hypothetical protein LPC_1819	Legionella pneumophila str. Corby	group 1	FFYPLDFTVCPTEVSDSHLAWIQTPREGVGGVLDSDGVALRG
645	0	67854320	gb	EAM49618.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Crocospaera watsonii WH 8501	group 1	FFYPLDYTFVCPTECSISHLAWINTPREGGLVYKLEGAIFRG
646	0	77955972	gb	ABB05536.1	thioredoxin peroxidase	Ferriprotophagus chinensis	group 1	VLVFFYPLDFTVCPSEVSDSHLAWRNTPVDDGGGGMAFRG
647	0	110833584	ref	YP_692443.1	oxidoreductase	Alcanivorax borkumensis SK2	group 1	MLGIGGVFFYPKDFVCPTEVLDGDKDLHKLIPDGVAYRY
648	0	110833584	ref	YP_692443.1	oxidoreductase	Alcanivorax borkumensis SK2	group 1	MLGIGGVFFYPKDFVCPTEVLDGDKDLHKLIPDGVAYRY
649	0	110833584	ref	YP_692443.1	oxidoreductase	Alcanivorax borkumensis SK2	group 1	MLGIGGVFFYPKDFVCPTEVLDGDKDLHKLIPDGVAYRY
650	0	1120591	gb	AAQ3934.1	thioredoxin peroxidase (AhpC, Alkyl hydroperoxide reductase)	Chlamydomonas reinhardtii	group 1	FFYPLDFTVCPTECSISHLAWINTPREGGLVYKLEGAIFRG
651	0	11967729	gb	ABM00300.1	alkyl hydroperoxide reductase/thiol specific antioxidant	Shewanella amazonensis SB2B	group 1	VLVFFYPLDFTVCPSEVSDSHLAWRNTPVDDGGGGMAFRG
652	0	11967729	gb	ABM00300.1	alkyl hydroperoxide reductase/thiol specific antioxidant	Shewanella amazonensis SB2B	group 1	VLVFFYPLDFTVCPSEVSDSHLAWRNTPVDDGGGGMAFRG
653	5.15E-14	67462360	ref	XP_647846.1	peroxidoxin	Entamoeba histolytica HM-1:IMSS	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
654	0	67474644	ref	XP_653071.1	peroxidoxin	Entamoeba histolytica HM-1:IMSS	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
655	0	114525204	gb	EAU54964.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Mariprofundus ferrooxydans PV-1	group 1	VLVFFYPLDFTVCPSEVSDSHLAWRNTPVDDGGGGMAFRG
656	0	94498872	ref	XP_01303446.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Mariprofundus ferrooxydans PV-1	group 2	FFYPADFTVCPTEVSTCHKAWHDTSPVGLADRGVLDPEGVG
657	1.01E-13	6286866	gb	AAV06744.1	peroxidoxin 3 isoform b	Streptomyces coelicolor A3(2)	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
658	0	56460903	ref	YP_156184.1	Peroxiredoxin, AhpC/Tsa family	Idiomarina loihiensis L2TR	group 1	MLGIGGVFFYPKDFVCPTEVLDGDKDLHKLIPDGVAYRY
659	0	146342224	ref	XP_001207272.1	Thioredoxin peroxidase (AhpC, Alkyl hydroperoxide reductase)	Bradyrhizobium sp. ORS278	group 1	VLVFFYPLDFTVCPSEVSDSHLAWRNTPVDDGGGGMAFRG
660	0	89072674	ref	XP_01159239.1	putative antioxidant, AhpC/Tsa family protein	Photobacterium sp. SKA34	group 1	VLVFFYPLDFTVCPSEVSDSHLAWRNTPVDDGGGGMAFRG
661	5.52E-13	165901730	gb	EDR27767.1	putative antioxidant, AhpC/Tsa family protein	Photobacterium sp. SKA34	group 1	VLVFFYPLDFTVCPSEVSDSHLAWRNTPVDDGGGGMAFRG
662	0	152986372	ref	YP_01350016.1	probable alkyl hydroperoxide reductase	Vibrio cholerae V52	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
663	0	15840750	ref	NP_230380.1	antioxidant, AhpC/Tsa family	Vibrio cholerae V52	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
664	0	121728598	ref	XP_01681618.1	antioxidant, AhpC/Tsa family	Vibrio cholerae V52	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
665	0	153216124	ref	XP_01950279.1	antioxidant, AhpC/Tsa family	Vibrio cholerae 1587	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
666	0	153220754	ref	XP_01951665.1	antioxidant, AhpC/Tsa family	Vibrio cholerae 1587	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
667	0	153802823	ref	XP_01951409.1	antioxidant, AhpC/Tsa family	Vibrio cholerae MZO-3	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
668	0	153818825	ref	XP_01971492.1	antioxidant, AhpC/Tsa family	Vibrio cholerae NCTC 8457	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
669	0	153823126	ref	XP_01975793.1	antioxidant, AhpC/Tsa family	Vibrio cholerae B33	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
670	0	153829409	ref	XP_01982076.1	antioxidant, AhpC/Tsa family	Vibrio cholerae B33	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
671	0	9655175	gb	AAI93896.1	antioxidant, AhpC/Tsa family	Vibrio cholerae 623-39	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
672	0	121629106	gb	EAX61950.1	antioxidant, AhpC/Tsa family	Vibrio cholerae V52	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
673	0	124114439	gb	EAY33259.1	antioxidant, AhpC/Tsa family	Vibrio cholerae 1587	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
674	0	124120318	gb	EAY39061.1	antioxidant, AhpC/Tsa family	Vibrio cholerae MAK 757	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
675	0	124121648	gb	EAY40391.1	antioxidant, AhpC/Tsa family	Vibrio cholerae NCTC 8457	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
676	0	125619633	gb	EAY248160.1	antioxidant, AhpC/Tsa family	Vibrio cholerae MO-3	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
677	0	126510607	gb	EAZ73201.1	antioxidant, AhpC/Tsa family	Vibrio cholerae MO10	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG
678	0	126519343	gb	EAZ76966.1	antioxidant, AhpC/Tsa family	Vibrio cholerae NCTC-8457	group 1	FFYPLDFTVCPTEVSDSHLAWINTPREGGLVYKLEGAIFRG

Table with columns for accession numbers, descriptions, and protein domains. Accession numbers include AF322012.66, AF322012.66, AF322012.66, etc. Descriptions include 'antioxidant, AhpC/Tsa family', 'iron repressible polyketide (putative reductase)', etc. Domains listed include 'Mycobacterium Tuberculosis AhpC', 'Echinococcus granulosus AhpC', etc.





719	7.24E-17	148653936	ref	YP_001281029.1	Peroxioredoxin	Psychrobacter sp. PrwF-1	group 2	MFYPLDFTFVCPTEVSTTHKAWHDSSEVMIAGLAERGAGGIG
720	148573020	gb	ABO95079.1	Peroxioredoxin	Psychrobacter sp. PrwF-1	group 1	YSVELKFFYPLDFTVCPTEIETHLAWINTPRQGGIGSGHTLRLG	
	0	27908085	ref	NP_776888.1	Bos taurus			
		Z2095987	sp	Q9BGJ2	Bos taurus			
		12407849	gb	AAG536360.1	Bos taurus			
		81673557	gb	AA09825.1	Bos taurus			
721	0	90076926	dbi	BAE88143.1	unnamed protein product	Macaca fascicularis	group 1	FFYPLDFTFVCPTEVSVTHLAWINTPREGGLVLEKGIAYRG
722	1.76E-18	146299873	ref	YP_001194464.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Flavobacterium johnsoniae UW101	group 4	NLKFYPKDFTFVCPTEVHFAMLNTPKNGGIESVYTRAST
723	0	157146780	ref	YP_001454098.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Flavobacterium johnsoniae UW101	group 2	FFYPADFTFVCPTEVSTTHKAWHSSSEEGADRRAEIGVGK
724	6.51E-12	157083985	gb	ABY13663.1	hypothetical protein CKO_02554	Citrobacter koseri ATCC BAA-895	group 3	MLGIGVGVFYPKDFTFVCPTEVSTHLEWLNKPRHGGVAVRYVLD
725	0	83951679	gb	EA098534.1	AhpC, alkyl hydroperoxide reductase C	Oceaniculis alexandrii HCC02833	group 1	VLGFYPKDFTFVCPSEVSCCHFAWRETIDVCGGIGEAVALRG
726	0	118475037	ref	YP_891456.1	alkyl hydroperoxide reductase TsaA	Campylobacter fetus subsp. fetus 82-40	group 1	FFYPLDFTFVCPTECVTHLAWINTPRQGGIGVLOSQVPRFRG
		118414263	gb	ABK62883.1	alkyl hydroperoxide reductase TsaA	Campylobacter fetus subsp. fetus 82-40		
		157104532	ref	XP_001668452.1	peroxiredoxins, prx-1, prx-2, prx-3	Aedes aegypti	group 1	
		17225115	gb	AA137254.1	2-Cys thioredoxin peroxidase	Aedes aegypti	group 1	
727	0	108880316	gb	EAT14454.1	peroxiredoxins, prx-1, prx-2, prx-3	Aedes aegypti	group 1	VLVFFWPLDFTFVCPSEVSIHHAWRKTPHKGGIGAGVALRA
728	0	91798166	gb	ABE60305.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Chromohalobacter salexigenis DSM 3043	group 1	NMKFFYPLDFTFVCPSEVSVSHLAWKNTPHKGGIGGGISLRG
729	0	91069074	gb	ABE04795.1	Thioredoxin peroxidase 1	Rickettsia belli RML369-C	group 1	FFYPLDFTFVCPTECVSTHLEWLNKPRHGGVLAAGIARFRG
730	5.56E-12	120610062	ref	YP_969740.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Acidovorax avenae subsp. citrulli AAC00-1	group 2	NLKFMAAFTFNCPTESHKVVHETSDEGLALRDGDVWIKYSE
731	1.25E-12	145698435	dbi	BAF57012.1	peroxiredoxin	Entamoeba nutalli	group 1	RIKAKFKFNLFYPLDWTFCVTEQLKVSVKRKGAGIARRG
732	0	51209959	ref	YP_0636923.1	thiol-specific antioxidant protein	Gracilaria tenuisulcata var. lili	group 1	CSLIFYPLDFTFVCPTEVLSHLAWLQMERIGGLGEGKALRG
733	0	50657713	gb	AA179689.1	thiol-specific antioxidant protein	Gracilaria tenuisulcata var. lili	group 1	VLVFFYPLDFTFVCPSEVSIHHAWRNTPVKGIGAGVAFRG
734	0	163781576	ref	ZP_02716576.1	alkyl hydroperoxide reductase	Shewanella frigidimarina NCIMB 400	group 1	TGGFGFFYPADFTFVCPTEVSVVHLAWQRSEKTLGALRGVWRK
735	0	114562632	ref	YP_750145.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella frigidimarina NCIMB 400	group 4	YFYPKDFTFVCPTECVSTHLEWLNKPRHGGVLAAGIARFRG
736	0	33089110	gb	AA098384.1	thioredoxin peroxidase	Shewanella frigidimarina NCIMB 400	group 1	FFYPLDFTFVCPTEVSTHLEWLNKPRHGGVLAAGIARFRG
737	2.89E-14	29011913	ref	NP_736308.1	hypothetical protein gbs1874	Streptococcus agalactiae NEM316	group 2	CFYPADFSVCPTEVSTVHKAWHDSVLDGSLAQRGADGIG
		76787981	ref	YP_330450.1	alkyl hydroperoxide reductase, subunit C	Streptococcus agalactiae A909		
		77408422	ref	ZP_00785161.1	alkyl hydroperoxide reductase, subunit C	Streptococcus agalactiae COH1		
		77411552	ref	ZP_00787895.1	alkyl hydroperoxide reductase, subunit C	Streptococcus agalactiae COH1		
		24413455	emb	CAD47533.1	Unknown	Streptococcus agalactiae NEM316		
		76563038	gb	ABA45622.1	alkyl hydroperoxide reductase, subunit C	Streptococcus agalactiae A909		
		77162406	gb	EA073374.1	alkyl hydroperoxide reductase, subunit C	Streptococcus agalactiae CjB111		
		77172945	gb	EA076075.1	alkyl hydroperoxide reductase, subunit C	Streptococcus agalactiae COH1		
738	0	29150165	emb	CAD79626.1	alkyl hydroperoxide reductase C22 protein	Helicobacter pylori	group 1	FFYPLDFTFVCPTEVSVHFAWNTPKVKGIGAGIARRG
		29150173	emb	CAD79630.1	alkyl hydroperoxide reductase C22 protein	Helicobacter pylori		
		29150175	emb	CAD79631.1	alkyl hydroperoxide reductase C22 protein	Helicobacter pylori		
		29150181	emb	CAD79634.1	alkyl hydroperoxide reductase C22 protein	Helicobacter pylori		
740	0	152990141	ref	YP_0013558663.1	peroxiredoxin, AhpC/Tsa family	Nitratiruptor sp. SBT155-2	group 1	FFYPLDFTFVCPSECVTHLAWKNTPKVKGIGVLLAGVALRG
741	0	151420202	dbi	BAF69506.1	peroxiredoxin, AhpC/Tsa family	Tribolium castaneum	group 1	FFYPLDFTFVCPTEVSTHLEWLNKPRHGGVLAAGIARFRG
742	1.14E-14	27469275	ref	NP_765912.1	PREDICTED: similar to CG1633-PA, isoform A	Staphylococcus epidermidis ATCC 12228	group 2	CFYPADFSVCPTEVSTVHKAWHDSVLDGSLAQRGADGIG
		38604793	sp	Q8CNIQ2	AhpC, STAES Alkyl hydroperoxide reductase subunit	Staphylococcus epidermidis ATCC 12228		
743	1.33E-15	146418172	ref	XP_001485052.1	peroxiredoxin TSA1	Pichia guilliermondii ATCC 6260	group 1	AFIPLAFTVCPTESSLAWNTVARDGGGLVLEGLVALRGVDS
		146390525	gb	EDK386883.1	peroxiredoxin TSA1	Pichia guilliermondii ATCC 6260		
744	0	70951732	ref	XP_745083.1	thioredoxin peroxidase	Plasmodium chabaudi chabaudi	group 1	VLNFFYPLNYTFVCPTEVSISSHMAWKNMIPKGGIGNSFALRG
745	0	56826292	emb	CAH74582.1	thioredoxin peroxidase, putative	Plasmodium chabaudi	group 1	VLVFFYPLDFTFVCPSEVSIHHAWRNTPVKGIGAGVAFRRG
746	6.27E-15	165901318	gb	EDR27405.1	antioxidant, AhpC/Tsa family protein	Shewanella benthica KT199	group 1	SCNQKQWVRVAVKLYPLDWTFCVPTSEVSKVGGVGTGVSRRG
747	0	1717797	sp	P52552	hypothetical protein, conserved	Entamoeba dispar SAM760	group 1	FFYPLDFTFVCPTEVSTHLEWLNKPRHGGVLAAGIARFRG
748	5.69E-10	13186345	gb	AAK15366.1	alkyl hydroperoxide reductase small subunit	Candidatus Carsonella ruddii	outlier	FFYPSFTFCPTENIKISTHKKWIESELPISEDFNKAIG
749	8.35E-12	16377323	gb	EDQ8489.1	predicted protein	Monosiga brevicollis MX1	group 1	AVPYLDWTFCVPTSEIDSHLAWAQHPHPRDGLAEGCALRGVLR
750	5.63E-12	163766373	ref	ZP_02173399.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Anaeromyxobacter sp. K	outlier	LFYPRDFTAVCPTELRGALGISVTHRRWEEKLEGVAARAVLE
751	0	160353198	gb	EDP79883.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Anaeromyxobacter sp. K	group 1	FFYPLDFTFVCPTEVSVTHLAWINTPREGGLVLEKGIAYRG
752	0	50085223	ref	YP_046733.1	thioredoxin peroxidase 1-like	synthetic construct	group 2	FFYPADFTFVCPTEVSTTHKAWHDTSEVLAIGLADRAGAGGIG
		49531199	emb	CAG68911.1	alkyl hydroperoxide reductase, C22 subunit, thioredoxin	Aerobacter sp. ADP1	group 1	VLVFFYPLDFTFVCPTECVSHLAWLKITPRQGGIEEGVSVYRG
753	0	67939924	ref	ZP_00532404.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Chlorobium phaeoaceticum BS1	group 1	

754	0	158593224	gb	EA063218.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Chlorobium phaeobacteroides BS1		group 1	VLASITLAGEFYPLDFTFCVPTTECSGSHLAWICTPREGGLG
755	0	158335840	ref	YP_00157014.1	AhpC/TSA family protein	Brugia malayi		group 1	FFYPLDFTFCVPTTEVLSGSHLAWITQIDRSGGVSTAGVALRG
756	0	158306081	gb	ABWZ17696.1	2-cys peroxiredoxin, putative	Acanyochloris marina MBIC11017		group 1	VSALFPLAFTEVCPTESSLLAWTNPREGGLGVLEGVVALRG
757	5.39E-17	6323613	ref	NP_013684.1	unnamed protein product	Tetraodon nigroviridis		group 1	VSLAFPLDFTFCVPTTEHAWNTARQGGGLGGQHTLRVLR
758	0	47227198	emb	CAG00560.1	Tsa1p	Saccharomyces cerevisiae		group 1	VSLAFPLDFTFCVPTTESSLLAWTNPREGGLGVLEGVVALRG
759	0	114327344	ref	YP_744501.1	thiol-specific antioxidant protein	Saccharomyces cerevisiae			
760	4.10E-14	151946133	gb	EDN64364.1	TSA	Saccharomyces cerevisiae			
761	0	83594229	ref	YP_427981.1	antioxidant: AhpC/TSA family	Saccharomyces cerevisiae YJM789		outlier	VFYPLDFTFCVPTSEISLHAWLQMDLDGFAQRAVLIKGGAG
762	0	163789074	ref	ABC23694.1	antioxidant: AhpC/TSA family	Babesia bovis T2Bo		group 3	KEGLDFWPKDFTFCVPTTEVAFAKLNSDFVSTEGVAQRAVL
763	3.08E-12	125923226	ref	YP_001031709.1	putative thioredoxin peroxidase	Granulibacter theohadensis CGDNIH1		group 1	RIKAFKFINLIFYPLDFTFCVPTTEQLKVSXKGGVAGIARRRG
764	0	1498198	emb	CAA633909.1	putative thioredoxin peroxidase	Granulibacter theohadensis CGDNIH1		group 1	VLAFFYPLDFTFCVPTSEISLHAWKKTPIEGGLGTGVALRA
765	0	131774	sp	P231161	alkyl hydroperoxide reductase subunit C	Enhanobeta histolytica HM-1:IMSS		group 1	VLVFFYPKDFTEVCPTEVSTSHFGLQMDKGGIKELIAYRG
766	0	84386690	ref	YP_00989716.1	alkyl hydroperoxide reductase c22 protein	Rhodospirillum rubrum ATCC 11170		group 1	VSDCFYPADFSVCPTEVHAAMHDSVDLDAISLAQRGADGIG
767	0	15786950	ref	XP_001683326.1	2-Cys peroxiredoxin bas1	Rhodospirillum rubrum ATCC 11170		group 1	ISSFFYPDLDFVCPTEVLSGSHLAWVQTDPSGGGLGGQIALRG
768	2.59E-18	150017004	ref	YP_001309258.1	2-Cys peroxiredoxin	Arabidopsis thaliana		group 1	FFYPLDFTFCVPTTESHTWINDIQDGGI.VSTEGISLRLVLIK
769	0	90414604	ref	YP_01222577.1	putative antioxidant: AhpC/Tsa family protein	Clostridium pasteurianum		group 2	FFYPADFTFCVPTTEVSTSHKAWHDTSDOGLADRAAEGIGVGK
770	0	52843159	ref	YP_098958.1	putative antioxidant: AhpC/Tsa family protein	Vibrio sp. MED222		group 1	
771	0	15846170	ref	NP_208354.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio splendens 12B01		group 1	
772	0	125805298	ref	XP_001340642.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
773	4.80E-16	148556489	ref	YP_001284071.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio splendens 12B01		group 1	
774	0	148501679	gb	ABQ68933.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
775	2.75E-11	149240585	ref	XP_001526168.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
776	0	83315146	ref	XP_730667.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
777	0	157738098	ref	YP_001490782.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
778	0	155996045	ref	NP_249539.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
779	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
780	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
781	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
782	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
783	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
784	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
785	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
786	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
787	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
788	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
789	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
790	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
791	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
792	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
793	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
794	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
795	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
796	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
797	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
798	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
799	0	126198511	gb	EA262574.1	peroxynitrite reductase: AhpC/Tsa family	Vibrio sp. MED222		group 1	
799	0	157929894	gb	ABW04135.1	natural killer cell enhancement factor	Epinephelus coioides		group 1	FFYPMDFTEVCPTEVDSCHLAWINKPROGGLGVLIKGLSYRG

780	4.28E-09	1491771.12	ref	ZP_01855719.1	2-cys peroxiredoxin	Planomyces maris DSM 8797			outlier	IFYPHDFVCPTEVSIHSSQWLQTPAQGALCVLDDGVLDTA
		1488440.04	gb	EDL58360.1	2-cys peroxiredoxin	Planomyces maris DSM 8797			group 1	FFYPLDFTVCPTEVSVSHLAWLQIDRSGGGLGVINGVALRG
781	0	11465738	ref	NP_053882.1	hypothetical protein PopuCP087	Porphyra purpurea			group 1	
		1723344	sp	P51Z72	YCF42_PORPU Putative peroxiredoxin ycf42 (Thio)	Porphyra purpurea				
		1276738	gb	AAC08159.1	ORF199	Porphyra purpurea				
782	2.96E-17	30250396	ref	NP_842456.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrosomonas europaea ATCC 19718			group 2	NTTVKVFYPADFTFVCPTEVSTTHKAWHDTSVLIAGLALRG
		30181181	emb	CAD86377.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrosomonas europaea ATCC 19718				
783	3.69E-15	34762764	ref	ZP_00143742.1	Alkyl hydroperoxide reductase C22	Fusobacterium nucleatum subsp. vincentii ATCC 49256			group 2	VFYPADFTFVCPTEVSVHKAHWADHSEYMIIEGLALRDNIGIG
		27887555	gb	EA424636.1	Alkyl hydroperoxide reductase C22	Fusobacterium nucleatum subsp. vincentii ATCC 49256				
784	0	157962395	ref	NP_001502429.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella pealeana ATCC 700345			group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNITPVKGGIGAGVAFRG
		157847395	gb	ABV87894.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Shewanella pealeana ATCC 700345				
		11558242	emb	CAC17803.1	peroxiredoxin	Phaseolus vulgaris			group 1	FFYPLDFTVCPTEVSVSHLAWWVQIDRSGLGVLIQIAGLRG
		11558244	emb	CAC17804.1	peroxiredoxin	Phaseolus vulgaris				
786	0	118093103	ref	XP_426543.2	PREDICTED: similar to Prdx3 protein	Gallus gallus			group 1	FFYPLDFTVCPTEVSVCHLAWINTPRSSGGLGVLSFGIALRG
787	0	54301429	gb	AAV33169.1	alkyl hydroperoxide reductase	Helicobacter pylori			group 1	FFWPKDFTFVCPTEVSVHFVAHWNTPVKGGIGEGIALRGNMK
788	5.01E-22	149181332	ref	ZP_01859829.1	alkyl hydroperoxide reductase	Bacillus sp. SG-1			group 1	NMKFFYPMDFSLFCPTTEVSTTHLAWINTDREGVALRGTGLCL
		148850895	gb	EDL65048.1	YkuU	Bacillus sp. SG-1				
789	2.03E-14	118395270	ref	XP_001023987.1	AhpC/TSA family protein	Tetrahymena thermophila SB210			group 1	FFYPDFFTVCPTEVLGVHAEWCKPREGGGLGKGAAYRGISI
		89284270	gb	EAR82324.1	AhpC/TSA family protein	Tetrahymena thermophila SB210				
790	0	16800713	ref	NP_470981.1	hypothetical protein lin1645	Listeria innocua ClpJ11262			group 1	VSLFFYPMDFTVCPTEVSHLAWINTPIEGGIVLIEGVIALRG
		16414132	emb	CAC86876.1	lin1645	Listeria innocua				
791	4.90E-13	115372324	ref	ZP_01459633.1	alkyl hydroperoxide reductase	Stigmatella aurantiaca DW4/3-1			group 3	FAWPKDFTFICPTTEVLGTHHADLKNLPTNALGEGVALRAVSV
		115370537	gb	EALU69463.1	alkyl hydroperoxide reductase	Stigmatella aurantiaca DW4/3-1				
792	4.54E-11	165896307	gb	EDR23761.1	hypothetical protein, conserved	Entamoeba dispar SAW760			outlier	RIKAKFKEMKKAQIGLFLYPLDWFVCPTESEVAGOLVSVWIK
793	0	11605946	emb	CAL55168.1	thioredoxin peroxidase (TS)	Ostreococcus tauri			group 1	FFYPLDFTFVCPTEVLGVSSHLAWLQIDRDGGGLDGTALRG
794	0	158319348	ref	YP_001517855.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Alkaliphilus oremlandii OhILa5			group 1	FFYPLDFTFVCPTEVSHKAWNAQKGGIGEGIALRGVLR
		158139547	gb	ABW17859.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Alkaliphilus oremlandii OhILa5				
796	0	148232668	ref	NP_001085918.1	MGC82793 protein	Xenopus laevis			group 1	FFYPLDFTFVCPTECSVTHLAWINTPRQGGIGOGHTLRGLR
		49118952	gb	AAH73532.1	MGC82793 protein	Xenopus laevis				
		34540424	ref	NP_904903.1	alkyl hydroperoxide reductase, C subunit	Porphyromonas gingivalis W83			group 2	VFYPGDFTFVCPTEGCVHKAWADSPVHMAYRGGQTLKVGK
797	3.54E-11	34540424	ref	NP_904903.1	alkyl hydroperoxide reductase, C subunit	Porphyromonas gingivalis W83				
		34396737	gb	AAQ65802.1	alkyl hydroperoxide reductase, C subunit	Porphyromonas gingivalis W83			group 2	W5VIFVPAFAFVFNCPTEVSHKWHETSPVKGEGALRGEVVK
798	6.24E-12	21230308	ref	NP_636225.1	alkyl hydroperoxide reductase subunit C	Xanthomonas campestris pv. campestris str. ATCC 33913			group 2	
		67679688	ref	YP_244640.1	alkyl hydroperoxide reductase subunit C	Xanthomonas campestris pv. campestris str. 8004				
		21111858	gb	AAAM0149.1	alkyl hydroperoxide reductase subunit C	Xanthomonas campestris pv. campestris str. ATCC 33913				
		66575030	gb	AAV50440.1	alkyl hydroperoxide reductase subunit C	Xanthomonas campestris pv. campestris str. 8004				
799	0	68551025	ref	ZP_00590496.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Xanthomonas campestris pv. campestris str. 8004			group 1	FFYPLDFTFVCPTECSVSHYAWIRTPRQGGIVLLAGIALRG
		68242108	gb	EAHZ4338.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Xanthomonas campestris pv. campestris str. 8004				
800	0	145483021	ref	XP_001427533.1	hypothetical protein GSPAT10030773001	Paramecium tetraurelia			group 1	VNGSFKKVSLLFFYPDLDFVCPTEVSVQGGI.GVLIFGVAFRG
		124394615	emb	CAG60135.1	unnamed protein product	Paramecium tetraurelia				
801	0	91778042	ref	YP_545798.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Methylobacillus flagellatus KT			group 1	VLVFFYPLDFTFVCPSEVSIHAWKNTPVKGGIGGGVAYVRG
		91710029	gb	ABE49957.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	uncultured methanogenic archaeon RC-1			group 2	IFYPADFTFVCPTEFSVWHKAWHDNSPEGVSRLADGYLKVGK
802	5.51E-17	147920432	ref	NP_685777.1	2-cysteine peroxiredoxin	uncultured methanogenic archaeon RC-1			group 2	
		110621173	emb	CAJ36451.1	2-cysteine peroxiredoxin	uncultured methanogenic archaeon RC-1				
803	0	112982996	ref	NP_001037083.1	thiol peroxiredoxin	Bombax mori			group 1	FFYPLDFTFVCPTEVLGTHLAWINTPRQGGIGLGTGIPFRGRSV
		38260562	gb	AAK15420.1	thiol peroxiredoxin	Bombax mori				
804	0	118358822	ref	XP_001013149.1	Thioredoxin-dependent peroxide reductase, mitochon	Tetrahymena thermophila SB210			group 1	FFYPLDFTFVCPTECSIEGGLGVLTGGIALRGTSKYWKNVHA
		89294916	gb	EAR92904.1	Thioredoxin-dependent peroxide reductase, mitochon	Tetrahymena thermophila SB210				
805	0	158853196	dbj	BATF91446.1	peroxiredoxin	Marsipenaes japonicus			group 1	FFYPLDFTFVCPTECSVSHLAWINTPREGGIGLVIEKEGIAFRG
806	0	34558282	ref	NP_908097.1	ALKYL-HYDROPEROXIDE REDUCTASE SUBUNIT	Wolmetia succinogenes DSM 1740			group 1	VLGFFYPLDFTFVCPSEVSVHFAWKNTFAVEGGIGESVALRG
		34484001	emb	CAE10397.1	ALKYL-HYDROPEROXIDE REDUCTASE SUBUNIT	Wolmetia succinogenes				
807	0	29854995	ref	NP_820667.1	antioxidant, AhpC/Tsa family	Coxiella burnetii RSA 493			group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNITPVKGGIGAGVALRG
		154707374	ref	YP_001423722.1	antioxidant, AhpC/Tsa family	Coxiella burnetii Duway 5J108-111				
		16183147	ref	YP_001597528.1	antioxidant, AhpC/Tsa family	Coxiella burnetii RSA 331				
		29542264	gb	AAO91201.1	antioxidant, AhpC/Tsa family	Coxiella burnetii RSA 493				
		154356600	gb	ABS78062.1	antioxidant, AhpC/Tsa family	Coxiella burnetii Duway 5J108-111				
		161763284	gb	ABX78926.1	antioxidant, AhpC/Tsa family	Coxiella burnetii RSA 331				
808	0	148226827	ref	NP_001089616.1	hypothetical protein LOC734674	Xenopus laevis			group 1	FFYPLDFTFVCPTEVSVCHLAWINTPRNGGLGVLLAGIALRG
		71051182	gb	AAH99274.1	MGC116486 protein	Xenopus laevis				
809	0	160872545	ref	ZP_02062677.1	peroxiredoxin-2	Rickettsiella grylli			group 3	VDITFWPKDFTFVCPTEVLLVHRAWRQYNDAGVAQRANGGLC
		159121344	gb	EDP46682.1	peroxiredoxin-2	Rickettsiella grylli				
810	0	6754976	ref	NP_035164.1	peroxiredoxin 1	Mus musculus			group 1	FFYPLDFTFVCPTEVDSCHLAWINTPKQGGIGLVIEKGISFRG
		547923	sp	P33700	PRDX1_MOUSE Peroxiredoxin-1 (Thioredoxin peroxid	Mus musculus				
		303690	dbj	BAA03713.1	MSP23	Mus musculus				
		666970	dbj	BAA04796.1	OSF-3	Mus musculus				
		5566114	gb	AAAD45323.1	peroxiredoxin 1	Mus musculus				
		6467221	dbj	BAA86992.1	type I peroxiredoxin	Mus musculus				
		12832161	dbj	BAB21990.1	unnamed protein product	Mus musculus				
		12843072	dbj	BAB25847.1	unnamed protein product	Mus musculus				
		26350375	dbj	BAC38827.1	unnamed protein product	Mus musculus				

54035546.gb	AAH83348.1	Peroxiredoxin 1	Mus musculus						VMLKFLPAAFSFVCPTECSVALWHWQNVPRYGGLEGISIRG
56103807.gb	AAH86648.1	Peroxiredoxin 1	Mus musculus						FFYPDLDFVYCPTEVLGSHLAWIQISREGGLGISTAGVALRG
74139592.dbl	BAE40933.1	unnamed protein product	Mus musculus						VFPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
74178146.dbl	BAE29960.1	unnamed protein product	Mus musculus						VSLFFYPMDFTFVCPTEVSHLAWNTPIEGGVLIEGVLRG
74191698.dbl	BAE30417.1	unnamed protein product	Mus musculus						FFYPKDFTYVCPTECSVTHSRWLAVERAGGIQGSVALRAVLD
74198383.dbl	BAE39676.1	unnamed protein product	Mus musculus						FFYPDLDFVCPTEVSTHAWNTPIEGGLVLEKGVAYRG
74203142.dbl	BAE26255.1	unnamed protein product	Mus musculus						VLFFYPLDFVCPSEVSHSHAWRNTAIDGGIGAGVAFRG
148898647.gb	EDL30594.1	mCG-19655	Mus musculus						VLVFFYPLDFVCPSEVSHSHAWRNTAIDGGIGAGVAFRG
160704211.gb	EAT178855.2	hypothetical protein SNOG_13831	Phaeosphaeria nodorum SNT15				group 1		FFYPDLDFVCPTECSVTHLAWNTPIEGGVLGQGHTRLRGLR
33863026.ref	NP_894586.1	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9313				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
33634943.emb	CAE20929.1	thioredoxin peroxidase	Prochlorococcus marinus str. MIT 9313				group 4		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
118035274.ref	EP_01506882.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phytofirmans PsJN				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
EA0707827.gb	EA0707827.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phytofirmans PsJN				group 2		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
116873036.ref	YP_849817.1	peroxiredoxin, putative	Listeria welshimeri serovar 6b str. SLC5334				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
116741914.emb	CAK21038.1	unnamed protein product	Listeria welshimeri serovar 6b str. SLC5334				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
158335068.ref	NP_297285.1	antioxidant, AhpC/T sa family	Chlamydia muridarum Nigg				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
8163341.gb	AAF73613.1	antioxidant, AhpC/T sa family	Chlamydia muridarum Nigg				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
12837636.dbl	BAE23893.1	unnamed protein product	Mus musculus				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
151938862.dbl	EDN67696.1	antioxidant, AhpC/TSA family	Vibrio sp. Ex25				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
163802450.ref	ZP_02196343.1	antioxidant, AhpC/T sa family protein	Vibrio campbellii AND4				group 1		FFYPDLDFVCPTECSVTHLAWNTPIEGGVLGQGHTRLRGLR
159173751.gb	EDP98966.1	antioxidant, AhpC/T sa family protein	Vibrio campbellii AND4				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
148228847.ref	NP_001082894	hypothetical protein LOC570477	Danio rerio				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
126631647.gb	AA134157.1	hypothetical protein LOC570477	Danio rerio				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
24947472.sp	Q91191	TDX_ONCMY Peroxiredoxin (Thioredoxin peroxidase)	Oncorhynchus mykiss				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
8612111.gb	AAA91319.1	RBT_NKEF	Oncorhynchus mykiss				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
6002472.gb	AAF06001.1	AF052202_1 2Cys-peroxiredoxin precursor	Brassica rapa				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
58584824.ref	YP_198397.1	Peroxiredoxin	Wobachia endosymbiont strain TRS of Bruglia malay				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
58411910.gb	AAW71155.1	Peroxiredoxin	Wobachia endosymbiont strain TRS of Bruglia malay				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
17988922.ref	NP_541555.1	ALKYL HYDROPEROXIDE REDUCTASE C22 PRO	Brucella melitensis 16M				group 3		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
17984753.gb	AA153819.1	ALKYL HYDROPEROXIDE REDUCTASE C22 PRO	Brucella melitensis 16M				group 2		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
119859162.ref	ZP_016379596.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Pseudomonas putida W619				group 2		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
119817799.gb	EAX20541.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Pseudomonas putida W619				group 2		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
29829774.ref	NP_824408.1	alkyl hydroperoxide reductase	Streptomyces avermiltis MA-4680				group 3		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
29606883.dbl	BAC70943.1	putative alkyl hydroperoxide reductase	Streptomyces avermiltis MA-4680				group 3		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
146329403.ref	YP_001209073	alkyl hydroperoxide reductase C22 subunit	Dichelobacter nodosus VCS1703A				group 2		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
146232873.gb	ABQ13851.1	alkyl hydroperoxide reductase C22 subunit	Dichelobacter nodosus VCS1703A				group 2		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
306925411.gb	AAF33385.1	thioredoxin peroxidase	Spironucleus barthanus				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
165898499.gb	EDR23903.1	hypothetical protein, conserved	Entamoeba dispar SAW760				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
156100549.ref	XP_001616002.1	2-Cys peroxiredoxin, putative	Entamoeba dispar SAW760				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
148804876.gb	EDL46275.1	2-Cys peroxiredoxin, putative	Plasmodium vivax				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
127511726.gb	YP_001092923	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella ichtica PV-4				group 2		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
126637021.gb	ABO22664.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Shewanella ichtica PV-4				group 2		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
62183806.gb	AAK73294.1	mitochondrial peroxiredoxin	Leishmania donovani				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
26987820.ref	NP_743245.1	antioxidant, AhpC/T sa family	Pseudomonas putida KT2440				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
148546368.ref	YP_001266470.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Pseudomonas putida KT2440				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
24982519.gb	AAH66708.1	AE016299_5 antioxidant, AhpC/T sa family	Pseudomonas putida KT2440				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
148510428.gb	ABQ17286.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Pseudomonas putida F1				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
66773956.sp	Q3E947	PRDX1_BOVIN Peroxiredoxin-1	Bos taurus				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
59858511.gb	AAOX09090.1	peroxiredoxin 1	Bos taurus				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
151563396.gb	AA148010.1	Peroxiredoxin 1	Bos taurus				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
52080021.ref	YP_078812.1	Alkyl hydroperoxide reductase	Bacillus licheniformis ATCC 14580				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
52785356.ref	YP_091225.1	YkuU	Bacillus licheniformis ATCC 14580				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
52003232.gb	AAU23174.1	Alkyl hydroperoxide reductase	Bacillus licheniformis ATCC 14880				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
52347898.gb	AAU40532.1	YkuU	Bacillus licheniformis DSM 13				group 2		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
160884092.ref	ZP_02065095.1	hypothetical protein BACOVA_02068	Bacteroides ovatus ATCC 8483				group 2		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
156110434.gb	EDO12179.1	hypothetical protein BACOVA_02068	Bacteroides ovatus ATCC 8483				group 2		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
145898431.dbl	BAE57010.1	peroxiredoxin	Entamoeba nuttallii				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
149453537.ref	XP_001518434	PREDICTED: hypothetical protein	Omithorhynchus anatinus				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
165894867.gb	EDR22704.1	hypothetical protein, conserved	Entamoeba dispar SAW760				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
58176947.tuul	TUUL	A Chain A, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
58176948.pdb	TUUL	B Chain B, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
58176949.pdb	TUUL	C Chain C, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
58176950.pdb	TUUL	D Chain D, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
58176951.pdb	TUUL	E Chain E, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY
58176952.pdb	TUUL	F Chain F, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		FFYPADFTFVCPTEVSTTHKAWHDTSDVLEGLALRGONGIG
58176953.pdb	TUUL	G Chain G, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		PGFTAKAFYPLDFVCPTECHLAWNTPRHGGIGISTVLR
58176954.pdb	TUUL	H Chain H, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		SVLPATKSLFFPLDFTFVCPTEVLGVSVFVGGGQIALRG
58176955.pdb	TUUL	I Chain I, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		VTKLFYPLDFTFVCPTEISVSHYQWRKTSVYNGGIGDSIALRA
58176956.pdb	TUUL	J Chain J, Tryparedoxin Peroxidase (Txpx) From Tr	Trypanosoma cruzi				group 1		MLGIGSAFFYPKDFTFVCPTEVLGVKLAWRDRHDKGGAYRY

840	0	540257.59	ref	YP_120001.1	putative alkylhydroperoxide reductase	Nocardia farcinica IFM 10152		group 3	LLTIGFVWPKDFTVFCPTTEVLGVHFQWRAHQHEDGVADRAVSV
841	0	540172.67	dbi	BAD58637.1	putative alkylhydroperoxide reductase	Nocardia farcinica IFM 10152		group 2	FFYPADFTVFCPTTEVTVYKAWHDAISEVLSGMAVREGEKIK
842	0	1603886.43	ref	ZP_020696.46.1	hypothetical protein BACUNJ1_01060	Bacteroides uniformis ATCC 8492		group 3	YFYPKDFTFVCPTEFNGDFAVLGVKLAWRREHKAGVALRAVSV
843	6.22E-12	16071013.38	gb	EAT191.829.2	alkyl hydroperoxide reductase/Thiol specific antioxidant	Raistonia metallidurans CH34		group 1	GFYPMWTFVCPTESSLAWTMASRDGGLGDIVLUEGIALRG
844	0	191501.69	emb	CAD796.28.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Phaeosphaeria nodorum SNI15		group 1	GFMPKDFTEVCPTEVSHVFAWIKNTPKVGGGEALRGNMK
845	0	102812.61	gb	AAAG15807.1	AF301002_1 thiorodoxin peroxidase 1	Schistosoma mansoni		group 1	VLLFFYPADFTVFCPTTEVSTSHLAWNDLDRSGGLGDGNVAFRG
846	0	15788592	emb	CAP094.11.1	novel protein similar to vertebrate peroxidoredoxin 3 (PR3)	Danio rerio		group 1	VLSFFYPLDFTVCPTEVSVTHLAWNTIPRSGGLGFGIALRL
847	0	1108352.92	gb	CAL17879.1	alkyl hydroperoxide reductase, C subunit	Alcanivorax borkumensis SK2		group 2	FFYPADFTVFCPTTEVSTHKAWHDTSDQGLADRAEAGVGVGK
848	1.61E-18	537163.07	ref	YP_106343.1	alkyl hydroperoxide reductase, subunit c	Burkholderia mallei ATCC 23344		group 2	VYFYPADFTVFCPTTEVSTHKAWHDTSDVLLIEGLALRGGEIK
		676427.89	ref	ZP_00441544.1	COG0450: Peroxiredoxin	Burkholderia mallei G88 horse 4			
		836205.69	ref	ZP_00930987.1	COG0450: Peroxiredoxin	Burkholderia mallei FMH			
		836249.00	ref	ZP_00935140.1	COG0450: Peroxiredoxin	Burkholderia mallei JHU			
		1002659.13	ref	ZP_01340351.1	hypothetical protein Bmal2_03001850	Burkholderia mallei 200272.1280			
		1009171.75	ref	ZP_01345654.1	hypothetical protein Bmal10_03001395	Burkholderia mallei 10399			
		1215965.05	ref	YP_990383.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei SAVP1			
		12438178.40	ref	YP_001024879.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei NCTC 10229			
		126445589	ref	YP_001079221.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei NCTC 10247			
		524222.77	gb	AAU45847.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei ATCC 23344			
		1212243.03	gb	ABM47834.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei SAVP1			
		12423898.60	gb	ABM69129.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei NCTC 10229			
		12623844.43	gb	ABO01655.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei NCTC 10247			
		14774556.64	gb	EDK62643.1	Burkholderia mallei FMH	Burkholderia mallei FMH			
		14775479.91	gb	EDK61855.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei JHU			
		14802499.99	gb	EDK63168.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei 200272.1280			
		1606970.60	gb	EDP870.30.1	alkyl hydroperoxide reductase, subunit C	Burkholderia mallei ATCC 10399			
849	0	890946.80	ref	ZP_01167616.1	antioxidant, AhpC/Prx1 sa family protein	Oceanospirillum sp. MED92		group 1	VLVFFYPLDFTVFCPSEVSHNAWRNTPVGGIGGGVAFRG
		890810.26	gb	EA806262.1	antioxidant, AhpC/Prx1 sa family protein	Oceanospirillum sp. MED92			
850	4.36E-15	443306.65	dbi	BAA20964.1	antigen	Entamoeba histolytica		group 1	LFYPLDWTFCPTTEQLKVSCHQAWCEADKGGVGTGYSRRG
851	0	14919157.9	ref	ZP_01869825.1	antioxidant, AhpC/Prx1 sa family protein	Vibrio shilonii AK1		group 1	VLVFFYPLDFTVFCPSEVSHNAWRNTAIDGGIGAGVAFRG
		1488345.97	gb	EDL51586.1	antioxidant, AhpC/Prx1 sa family protein	Vibrio shilonii AK1			
852	1.21E-13	572390.76	ref	YP_180212.1	putative peroxiredoxin	Ehlichia ruminantium str. Weigelvonden		group 1	NLKVYPRDFTVFCPTTEIETSTCHSHWRNISKGGIDNSIALRA
		565790.19	ref	YP_197231.1	Probable peroxiredoxin (26 kDa antigen)	Ehlichia ruminantium str. Weigelvonden			
		586170.78	ref	YP_196277.1	Probable peroxiredoxin (26 kDa antigen)	Ehlichia ruminantium str. Gardel			
		571611.55	emb	CALH68068.1	putative peroxiredoxin	Ehlichia ruminantium str. Weigelvonden			
		584166.90	emb	CAL27803.1	Probable peroxiredoxin (26 kDa antigen)	Ehlichia ruminantium str. Gardel			
		584176.45	emb	CAL26849.1	Probable peroxiredoxin (26 kDa antigen)	Ehlichia ruminantium str. Weigelvonden			
853	0	54535.49	ref	NP_006397.1	thioredoxin peroxidase	Homo sapiens		group 1	VSVELKFFYPLDFTVFCPTTEHLAWINTPRQGLGSGHTLRG
		30247271	sp	Q13162	PRDX4_HUMAN Peroxiredoxin-4 (Prx-IV) (Thioredoxin)	Homo sapiens			
		793811	gb	AA895175.1	antioxidant enzyme AOE37-2	Homo sapiens			
		131776.46	gb	AAH03609.1	Peroxiredoxin 4	Homo sapiens			
		139379.85	gb	AAH07107.1	Peroxiredoxin 4	Homo sapiens			
		168769.97	gb	AAH16770.1	Peroxiredoxin 4	Homo sapiens			
		494563.71	emb	CAG46506.1	PRDX4	Homo sapiens			
		1196194.02	gb	EAW98996.1	peroxiredoxin 4	Homo sapiens			
		1239967.03	gb	ABM85953.1	peroxiredoxin 4	Homo sapiens			
854	0	608302.47	gb	AA336919.1	peroxiredoxin 2	synthetic construct		group 1	FFYPLDFTVFCPTTEVSHLAWINTPRQGLGVLKEGIAYRG
855	0	181525.31	emb	CAD20737.1	thioredoxin peroxidase	Ostertagia ostertagi		group 1	IDVFFYPLDFTVFCPTTESHLAWINTPRMGGLGVLKEGIAYRG
856	0	1609423.40	ref	ZP_020896.48.1	hypothetical protein CLOBOL_07225	Clostridium botteae ATCC BAA-613		outlier	FFYPMDFTFVCPTEVSTHQAWIRNGLGVVALRSLKNTWITG
		1584347.04	gb	EDP12477.1	hypothetical protein CLOBOL_07225	Clostridium botteae ATCC BAA-613			
857	2.00E-20	15610311.11	ref	XP_001617294.8	thioredoxin peroxidase2, putative	Plasmodium vivax Sal-1		group 1	VTKLYPLNYTFVCPTEISVSHLAWNKMPKIGGINSFALRG
		1488061.22	gb	EDL47521.1	thioredoxin peroxidase2, putative	Plasmodium vivax			
858	0	1454114.96	gb	ABP68406.1	mitochondrial tyrosine peroxidase	Leishmania donovani		group 1	FFYPMDFTFVCPTEVSCSHLAWNIPRKGGLVLAASGIALRG
859	0	5089751.33	gb	AA185819.1	putative thioredoxin peroxidase 3	Glossina morsitans morsitans		group 1	FFYPLDFTVFCPTTEVSHLAWVDRKLGGLVLLGSLRGLRG
860	0	74987.30	pir	gi	T16005 hypothetical protein F09E5.2 - Caenorhabditis	Caenorhabditis elegans		group 1	VDVFFYPLDFTVFCPTTESHLAWINPRHGGGLGVLKEGIAYRG
		3804757.1	gb	AA809688.1	similar to Drosophila melanogaster Jafra1	Drosophila yakuba		group 1	FFYPLDFTVFCPTTEVSHLAWINTPRQGLGVLDTGIPFRFG
		7419889.0	dbi	BAE30667.1	unnamed protein product	Mus musculus		group 1	FFYPLDFTVFCPTTESHLAWINTPKQGLGVLKEGISFRG
863	1.55E-16	1342933.43	ref	YP_001117079.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia vietnamiensis G4		group 2	VYFYPADFTVFCPTTEVSTHKAWHDTSEVLLIEGMLRGGDNGIG
		1341385.00	gb	AB057614.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia vietnamiensis G4			
		660462.06	ref	YP_236047.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Pseudomonas syringae pv. syringae B728a		group 2	FFYPMDFTFVCPTEVSTHAAHWNTSPVLIAGLADRGDGGVVG
		717381.50	ref	YP_274474.1	alkyl hydroperoxide reductase, C subunit	Pseudomonas syringae pv. phaseolicola 1448A			
		632589.13	gb	AA338009.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Pseudomonas syringae pv. phaseolicola 1448A			
		715887.03	gb	AA239141.1	alkyl hydroperoxide reductase, C subunit	Bacillus amyloliquefaciens FZB42		group 2	CFYPADEFVFCPTTEVSTVHKGWHDSDSEVLDLTLADRCAGGIG
865	5.59E-16	1546880.95	ref	NP_001423256.1	AhpC	Bacillus amyloliquefaciens FZB42		group 2	
		1543539.46	gb	ABS76025.1	AhpC	Bacillus amyloliquefaciens FZB42			
866	0	216724.64	ref	NP_660531.1	alkyl hydroperoxide reductase subunit C	Buchnera aphidicola str. Sg (Schizaphis graminum)		group 1	ILKFFWPMDFTFVCPSEVSHVQAWQNTFPNGGIGLNIJALRA

	25091461	sp	Q8K9W0	ISAA_BUCAP Probable peroxidoxin (Thioredoxin reductase)	Buchnera aphidicola str. Sg. (Schizaphis graminum)		
867	21623080	gb	AAV67742.1	alkyl hydroperoxidase subunit C	Buchnera aphidicola str. Sg. (Schizaphis graminum)	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
868	0	8420888.1	AAV31766.1	trypanoxin peroxidase 2	Leishmania guyanensis	group 1	VLVFFYPLDFTFVCPSEVSVTHYAWRNTFPVKGGIGDHWALRA
	0	82703502	YP_4130688.1	Alkyl hydroperoxidase reductase/Thiol specific antioxidant	Nitrosospora multiformis ATCC 25196	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
869	0	82411567	NP_488688.1	Alkyl hydroperoxidase reductase/Thiol specific antioxidant	Nitrosospora multiformis ATCC 25196	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	17232133	NP_488688.1	Alkyl hydroperoxidase reductase/Thiol specific antioxidant	Nitrosospora multiformis ATCC 25196	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	75908245	YP_322541.1	Alkyl hydroperoxidase reductase/Thiol specific antioxidant	Anabaena variabilis ATCC 29413		
	0	1713378	dbj BAB76340.1	peroxidoxin	Nostoc sp. PCC 7120		
870	0	75701970	dbj BAB76340.1	Alkyl hydroperoxidase reductase/Thiol specific antioxidant	Anabaena variabilis ATCC 29413	group 1	LFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	28514233	Q171172	TDX2 BRUMA Thioredoxin peroxidase 2 (Peroxiredoxin)	Bruglia malayi		
	0	2347061	dbj AAB67873.1	thiol-specific antioxidant protein	Bruglia malayi		
871	0	17738015	ref NP_524367.1	Peroxiredoxin 5037 CG5626-PA isoform A	Drosophila melanogaster	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	11935114	dbj AAG41976.1	AF311742_1 thioredoxin peroxidase 3	Drosophila melanogaster		
	0	23171565	dbj AAAF5443.1.2	CG5826-PA	Drosophila melanogaster		
	0	29335975	dbj AAO74686.1	SD08737p	Drosophila melanogaster	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
872	0	71028056	ref XP_763671.1	thioredoxin peroxidase 1	Theileria parva strain Muguga	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
873	0	159137835	ref AB1988997.1	2-Cys peroxidoxin	Theileria parva	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
874	0	148227074	ref NP_001085414.1	MGC83078 protein	Thynnus maccoyii	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	48734656	dbj AAH72318.1	MGC83078 protein	Xenopus laevis	group 4	RSIFFYPKDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
875	2.60E-11	76789341	ref YP_328427.1	thioredoxin peroxidase	Chlamydia trachomatis AHAR-13	group 1	LFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	76167871	dbj AA50879.1	thioredoxin peroxidase	Chlamydia trachomatis AHAR-13	group 1	LFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
876	3.86E-14	16590527	dbj EDR30285.1	hypothetical protein, conserved	Entamoeba dispar SAW760	group 1	NLKFYPLDFTFVCPSEVSVTHLAWKNTFPVKGGIGDHWALRA
877	0	83309763	ref YP_42027.1	Peroxiredoxin	Magnetospirillum magnetotum AMB-1	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	82944604	dbj BAE46466.1	Peroxiredoxin	Magnetospirillum magnetotum AMB-1	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
878	0	119113794	ref XP_310704.3	thioredoxin-dependent peroxidase (AGAP000396-PA)	Anopheles gambiae str. PE8T	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	116130529	dbj EAA06406.3	thioredoxin-dependent peroxidase (AGAP000396-PA)	Anopheles gambiae str. PE8T	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
879	0	86605254	ref YP_474017.1	antioxidant, AhpC/T sa family	Synechococcus sp. JA-3-3Ab	group 1	VMAFFYPDFFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	86553796	dbj ABC98754.1	antioxidant, AhpC/T sa family	Synechococcus sp. JA-3-3Ab	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
880	2.36E-16	27232101	dbj AAG25678.2	AF305718_1 peroxidoxin	Toxoplasma gondii	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
881	0	11968132	ref NP_071985.1	peroxidoxin 3	Rattus norvegicus	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	4336877	dbj AAD17992.1	PRX-III	Rattus norvegicus	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
882	0	77164396	ref YP_342921.1	Alkyl hydroperoxidase reductase/Thiol specific antioxidant	Nitrosococcus oceanus ATCC 19707	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	76882710	dbj ABA57391.1	Alkyl hydroperoxidase reductase/Thiol specific antioxidant	Nitrosococcus oceanus ATCC 19707	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
883	0	56751802	ref YP_172503.1	thioredoxin peroxidase	Synechococcus elongatus PCC 6301	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	56686761	dbj BAD79883.1	thioredoxin peroxidase	Synechococcus elongatus PCC 6301	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
884	0	33519693	ref NP_878525.1	alkyl hydroperoxidase reductase C22 protein	Candidatus Blochmannia floridanus	group 1	NLFFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	33517356	dbj CAD83741.1	alkyl hydroperoxidase reductase C22 protein	Candidatus Blochmannia floridanus	group 1	FFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
885	0	116220204	ref NP_01485647.1	hypothetical protein VchoV5_02001759	Vibrio cholerae V51	group 1	FFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
886	0	33594422	ref NP_882066.1	alkyl hydroperoxidase reductase	Bordetella pertussis Tohama 1	group 3	YFYPKDFTFVCPTEVLLVYKLRWRREHPTGALIAAGVALRAVS
	0	33597884	ref NP_885527.1	alkyl hydroperoxidase reductase	Bordetella pertussis Tohama 1	group 3	YFYPKDFTFVCPTEVLLVYKLRWRREHPTGALIAAGVALRAVS
	0	33602787	ref NP_890347.1	alkyl hydroperoxidase reductase	Bordetella bronchiseptica RB50	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	33564497	dbj CAE43811.1	alkyl hydroperoxidase reductase	Bordetella pertussis Tohama 1	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	33574313	dbj CAE38646.1	alkyl hydroperoxidase reductase	Bordetella pertussis Tohama 1	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
887	1.49E-16	118594070	ref ZP_01551417.1	alkyl hydroperoxidase reductase, subunit C	Methylobacterium bacterium HTCC2181	group 2	VFYPADFTFVCPTEVSTTHKAWHDASDVMIAAGLALRGDLGIG
	0	118439848	dbj EAV46475.1	alkyl hydroperoxidase reductase, subunit C	Methylobacterium bacterium HTCC2181	group 2	VFYPADFTFVCPTEVSTTHKAWHDASDVMIAAGLALRGDLGIG
888	0	161504412	ref YP_001571524.1	hypothetical protein SARI_02523	Salmonella enterica subsp. arizonae serovar 62:z4:z23:--	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	160865759	dbj ABX22382.1	hypothetical protein SARI_02523	Salmonella enterica subsp. arizonae serovar 62:z4:z23:--	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
889	0	84569882	dbj ABC59223.1	natural killer cell enhancement factor	Cyprinus carpio	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
890	3.35E-15	149194237	ref ZP_01871334.1	ALKYL HYDROPEROXIDE REDUCTASE	Camibacter medianticus TB-2	group 2	VLKGFYPADFTFVCPTEVSTSHKRFVETEPKLTIAAGLALRG
	0	149135412	dbj EDM2389.1.1	ALKYL HYDROPEROXIDE REDUCTASE	Camibacter medianticus TB-2	group 2	FFYPADFTFVCPTEVSTTHKAWHDASDVMIAAGLALRGDLGIG
891	0	11973759	ref YP_926495.1	alkyl hydroperoxidase reductase, C subunit	Shewanella amazonensis SB2B	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
	0	11976255	dbj ABI98825.1	alkyl hydroperoxidase reductase, C subunit	Shewanella amazonensis SB2B	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
892	0	3089370	dbj AAC15095.1	trypanoxin peroxidase	Crithidia fasciculata	group 1	FFYPLDFTFVCPTECVSVAHLQWLTLOERKGGGLGVLDQGVAYRG
893	0	34499194	ref NP_903409.1	probable peroxidase	Chromobacterium violaceum ATCC 12472	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	34105045	dbj AAO61401.1	probable peroxidase	Chromobacterium violaceum ATCC 12472	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
894	0	86145571	ref ZP_01063901.1	alkyl hydroperoxidase reductase C22 protein	Vibrio sp. MED222	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	85836542	dbj EAQ34668.1	alkyl hydroperoxidase reductase C22 protein	Vibrio sp. MED222	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
895	5.86E-11	87306388	ref ZP_01088535.1	2-cys peroxidoxin	Blastopirellula marina DSM 3645	outlier	LFYPRODFVCPTEVSTSHKRLQVLTQPPSDGLPNRGLVDKIALG
	0	87290567	dbj EAQ32454.1	2-cys peroxidoxin	Blastopirellula marina DSM 3645	outlier	LFYPRODFVCPTEVSTSHKRLQVLTQPPSDGLPNRGLVDKIALG
896	0	145299771	ref YP_001142612	alkyl hydroperoxidase reductase subunit C	Aeromonas salmonicida subsp. salmonicida A449	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	142852543	dbj ABO90864.1	alkyl hydroperoxidase reductase subunit C	Aeromonas salmonicida subsp. salmonicida A449	group 1	VLVFFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
897	0	157164012	ref YP_001466308.1	2-cys peroxidoxin BAST1, Thiol-specific antioxidant	Campylobacter concisus 13826	group 1	VLGFFYPMDFTFVCPSEVSVSHFAWKEITPVKGGIGAGVALRG
	0	112800854	dbj EAT98198.1	antioxidant, AhpC/T sa family	Campylobacter concisus 13826	group 1	VLGFFYPMDFTFVCPSEVSVSHFAWKEITPVKGGIGAGVALRG
898	0	87119426	ref ZP_01075323.1	antioxidant, AhpC/T sa family protein	Marinomonas sp. MED121	group 1	VLAFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
	0	86164902	dbj EAQ6670.1	antioxidant, AhpC/T sa family protein	Marinomonas sp. MED121	group 1	VLAFYPLDFTFVCPSEVSVHNAMRNVELDGGIGEMAFRGG
899	0	158010320	ref NP_266332.1	alkyl hydroperoxidase reductase subunit C	Escherichia coli O157:HT EDL933	group 2	FFYPADFTFVCPTEVSTTHKAWHDASDVMIAAGLALRGDLGIG
	0	15828958	ref NP_308671.1	alkyl hydroperoxidase reductase subunit C	Escherichia coli O157:HT str. Sakai	group 2	FFYPADFTFVCPTEVSTTHKAWHDASDVMIAAGLALRGDLGIG
	0	16128588	ref NP_415138.1	alkyl hydroperoxidase reductase, C22 subunit	Escherichia coli K12		

24111953	ref	NP_706463.1	alkyl hydroperoxide reductase subunit C	Shigella flexneri 2a str. 301			
26246586	ref	NP_752625.1	alkyl hydroperoxide reductase subunit C	Escherichia coli CF1073			
30062063	ref	NP_836234.1	alkyl hydroperoxide reductase subunit C	Shigella flexneri 2a str. 2457T			
74311140	ref	YP_109859.1	alkyl hydroperoxide reductase subunit C	Shigella sonnei Ssg046			
75177480	ref	ZP_00697561.1	COG0450: Peroxiredoxin	Shigella boydii BS512			
75239509	ref	ZP_00710898.1	COG0450: Peroxiredoxin	Escherichia coli B171			
75239588	ref	ZP_00716056.1	COG0450: Peroxiredoxin	Escherichia coli B7A			
75240763	ref	ZP_00724670.1	COG0450: Peroxiredoxin	Escherichia coli F11			
75259657	ref	ZP_00730064.1	COG0450: Peroxiredoxin	Escherichia coli E22			
75514700	ref	ZP_00736955.1	COG0450: Peroxiredoxin	Escherichia coli 53638			
82543053	ref	YP_407000.1	alkyl hydroperoxide reductase subunit C	Shigella boydii Sb227			
83570434	ref	ZP_00921879.1	COG0450: Peroxiredoxin	Shigella dysenteriae 10/12			
83589959	ref	ZP_00925589.1	COG0450: Peroxiredoxin	Escherichia coli 10-1-1			
89107473	ref	AP_001283.1	alkyl hydroperoxide reductase, C22 subunit	Escherichia coli W3110			
91209653	ref	YP_539639.1	alkyl hydroperoxide reductase subunit C	Escherichia coli UT189			
110840837	ref	YP_688565.1	alkyl hydroperoxide reductase subunit C	Escherichia coli 536			
110840601	ref	YP_688121.1	alkyl hydroperoxide reductase subunit C	Shigella flexneri 5 str. 8401			
117622827	ref	ZP_851740.1	alkyl hydroperoxide reductase subunit C	Escherichia coli APEC O1			
124550194	ref	ZP_017700943.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Escherichia coli B			
157155096	ref	YP_001461769.1	alkyl hydroperoxide reductase subunit C	Escherichia coli E24377A			
157160102	ref	YP_001457420.1	alkyl hydroperoxide reductase subunit C	Escherichia coli HS			
83286946	sp	P0AE08	AHPC ECOLI Alkyl hydroperoxide reductase subunit C	Escherichia coli K12			
83286944	sp	P0AE10	AHPC ECOL57 Alkyl hydroperoxide reductase subunit C	Escherichia coli O157:H7			
83286945	sp	P0AE09	AHPC ECOL6 Alkyl hydroperoxide reductase subunit C	Escherichia coli O6			
83286947	sp	P0AE11	AHPC SHIFL Alkyl hydroperoxide reductase subunit C	Escherichia coli Shigella flexneri			
26108985	gb	AAAG54940.1	AE005240_6 alkyl hydroperoxide reductase, C22 subunit	Escherichia coli O157:H7 EDL933			
216543	dbi	BA0A2485.1	alkyl hydroperoxide reductase C22 protein	Escherichia coli CF1073			
1778523	dbi	AA8A0806.1	alkyl hydroperoxide reductase C22 subunit	Escherichia coli W3110			
178822	gb	AAAC73706.1	alkyl hydroperoxide reductase, C22 subunit	Escherichia coli K12			
406222	dbi	BAA35235.1	alkyl hydroperoxide reductase, C22 subunit	Escherichia coli W3110			
13360102	dbi	BAB34067.1	alkyl hydroperoxide reductase C22 subunit	Escherichia coli O157:H7 str. Sakai			
24050763	dbi	AAAN42170.1	alkyl hydroperoxide reductase, C22 subunit	Shigella flexneri 2a str. 301			
30040307	gb	AAAP16040.1	alkyl hydroperoxide reductase, C22 subunit	Shigella flexneri 2a str. 2457T			
73854617	gb	AA287324.1	alkyl hydroperoxide reductase, C22 subunit	Shigella sonnei Ssg046			
81244464	gb	AB865172.1	alkyl hydroperoxide reductase, C22 subunit	Shigella boydii Sb227			
91071227	gb	ABE06108.1	alkyl hydroperoxide reductase, C22 subunit; detoxified	Escherichia coli UT189			
110342429	gb	ABG68666.1	alkyl hydroperoxide reductase C22 protein	Escherichia coli 536			
110614149	gb	ABF02816.1	alkyl hydroperoxide reductase, C22 subunit, thioredoxin	Shigella flexneri 5 str. 8401			
115511951	gb	ABJ00026.1	alkyl hydroperoxide reductase, C22 subunit	Escherichia coli APEC O1			
124499357	gb	EAY46847.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Escherichia coli C str. ATCC 8739			
157065782	gb	ABV05037.1	alkyl hydroperoxide reductase subunit C	Escherichia coli HS			
157077126	gb	ABY16834.1	alkyl hydroperoxide reductase subunit C	Escherichia coli E24377A			
0	82775887	ref	YP_402234.1	Shigella dysenteriae Sd197			
81240035	gb	AB860745.1	alkyl hydroperoxide reductase, C22 subunit	Shigella dysenteriae Sd197			
16081061	ref	NP_091889.1	alkyl hydroperoxide reductase	Bacillus subtilis subsp. subtilis str. 168	group 2		FFYPADFTFVCPTEVSTTHKAWHSSSEEGGLADRAAEGIGVK
1703216	sp	P80239	AHPC_BAGSU Alkyl hydroperoxide reductase subunit C	Bacillus subtilis	group 2		CFYPADFSVCPTEVSTVHKGWHDSDSEVLDITGLADRGAGGIG
1064762	dbi	BAA11268.1	alkyl hydroperoxide reductase	Bacillus subtilis			
2636556	emb	CAB16046.1	alkyl hydroperoxide reductase (small subunit)	Bacillus subtilis subsp. subtilis str. 168			
0	149187903	ref	ZP_01866199.1	Vibrio shilonii AK1	group 2		NTTIKFFYPADFTFVCPTEVSTTHKAWHSDSDOGLADRAVVK
148838299	gb	EDL55240.1	alkyl hydroperoxide reductase c22 protein	Vibrio shilonii AK1	group 1		VDVFFYPLDFTFVCPSESHYA WCLQGQEGGIGYL VAGIALRG
0	159107847	ref	XP_001704199.1	giardia lamblia ATCC 50803	group 1		
157432254	gb	EDOF76525.1	Peroxioredoxin 1	giardia lamblia ATCC 50803	group 1		
0	158593227	gb	EDP31822.1	Brugia malayi	group 1		FFYPLDFTFVCPTEAFSDRCCSHLAWIQTPREGGLGVLA
3.96E-17	121600300	ref	YP_982629.1	Polaromonas naphthalenivorans Cj2	group 2		VFYPADFTFVCPTEVSTTHKAWHSDTSEVMIAGLAVRGMGIG
0	120594269	gb	ABM37708.1	Polaromonas naphthalenivorans Cj2	group 2		FFYPADFTFVCPTEVSTVHKAWHDASEVSDGMAYRGEKIK
0	53712551	ref	YP_098543.1	Bacteroides fragilis YCH46	group 2		
60680733	ref	YP_210877.1	alkyl hydroperoxide reductase C subunit	Bacteroides fragilis NCTC 9343			
52215416	dbi	BAD48009.1	alkyl hydroperoxide reductase subunit C	Bacteroides fragilis YCH46			
60492167	emb	CAH06930.1	alkyl hydroperoxide reductase C subunit	Bacteroides fragilis NCTC 9343			
3322801	gb	AA65497.1	alkyl hydroperoxide reductase (ahpC)	Troponea pallidum subsp. pallidum str. Nichols	group 2		MFYPADFTFVCPTEVSTVHKAWADATDVLTLTWHALRGDMGIG
0	149375684	ref	ZP_01893453.1	Marinobacter algicola D5893	group 2		FFYPADFTFVCPTEVSTTHKAWHSSSEEGGLADRAAEGIGVK
149360086	gb	EDM4864.1	alkyl hydroperoxide reductase, C subunit	Marinobacter algicola D5893	group 1		FFYPLDFTFVCPTEVSHLAWVQIDRRSGGGLVLIQIALRG
0	115448541	ref	NP_001047050.1	Oryza sativa (japonica cultivar-group) precursor (Thiol-specific antioxidant protein)			
75323389	sp	G6ER94	BAS1_ORYS12-Cys peroxiredoxin BAS1, chloroplast	Oryza sativa (japonica cultivar-group)			
50251981	dbi	BAD27915.1	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)			
50252657	dbi	BAD28826.1	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)			
67904930	emb	CAUJ1693.1	2-Cys peroxiredoxin	Oryza sativa (japonica cultivar-group)			
113536581	dbi	BAF08964.1	Oso2g0537700	Oryza sativa (japonica cultivar-group)			



910	0	150009971	ref	YP_001304720.1	alkyl hydroperoxide reductase subunit C	Parabacteroides distansons ATCC 8503	group 2	VLGFFYPADFTFVCPTEVSTVHKAWHDASSETGALSEGMYVRG
911	0	149838401	gb	ABR45098.1	alkyl hydroperoxide reductase subunit C	Parabacteroides distansons ATCC 8503	group 1	FFYPLDFTFVCPTEVSTVHAWATODRGGGLGNLKEGVALRG
912	2.66E-16	85709406	ref	ZP_01040471.1	peroxiredoxin	Taraxaculum camphoratus	group 2	MGISGFFPADWTFVCPTEVSTVSHKAWHDISEVLSVGLADRA
914	0	85688116	gb	EAQ28120.1	peroxiredoxin	Erythrobacter sp. NAP1	group 3	MLGVGNLKVSLFFWPKDFTFVCPTEVHHAWRTHRDHAGVAQRA
915	1.40E-13	94958241	ref	YP_01944056.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Acidobacteria bacterium Ellin345	group 2	CFYPADEFVCPTEVSTVHKAWHDHSEVLDLGLAQRGADGIG
916	0	46907834	ref	YP_014223.1	alkyl hydroperoxide reductase subunit C	Acidobacteria bacterium Ellin345	group 1	VSLFFYPMDFTFVCPTEVSTVHAWRTHRDHAGVAQRA
		47094074	ref	ZP_00231801.1	peroxiredoxin, putative	Listeria monocytogenes str. 4b F2365		
		153167188	ref	ZP_01927469.1	peroxiredoxin, putative	Listeria monocytogenes str. 4b H7858		
		153202520	ref	ZP_01944056.1	hypothetical protein LMHG_01712	Listeria monocytogenes FSL NI-017		
		46881103	gb	AA104400.1	putative peroxiredoxin	Listeria monocytogenes str. 4b F2365		
		47017560	gb	EAL08366.1	peroxiredoxin, putative	Listeria monocytogenes str. 4b H7858		
		133727122	gb	EBA28620.1	hypothetical protein LMHG_01712	Listeria monocytogenes FSL NI-017		
		133735296	gb	EBA33693.1	hypothetical protein LMMSG_00932	Listeria monocytogenes HPB2282		
917	0	54301427	gb	AAV33168.1	alkyl hydroperoxide reductase	Helicobacter pylori	group 1	FFWPKDFTFVCPTEVSVHFAWKNTPVKGGIGEAIALRGNMK
918	0	71067866	gb	AAZ22925.1	thioredoxin peroxidase	Haliotis discus hannai	group 1	FFYPLDFTFVCPTEVSDVSHLAWINTPRQGGIAGEVAFRG
919	0	116074890	ref	ZP_01472151.1	thioredoxin peroxidase	Synechococcus sp. RS9916	group 1	FFYPLDFTFVCPTEVLDVSDSSHLAWIQTPRQGGIAGEVAFRG
920	0	39998336	ref	NP_954287.1	thioredoxin peroxidase	Synechococcus sp. RS9916	group 1	VTKFFYPDLDFTFVCPSEVSVTHMAWKNTPVNGGGIAGEVAFRG
921	0	71906203	ref	YP_283790.1	thioredoxin peroxidase	Geobacter sulfurreducens PCA	group 1	NLKFFYPDLDFTFVCPSEVSIHLAWKNITAVECGIAGEVAFRG
		71845824	gb	AA245320.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Dechloromonas aromatica RCB	group 1	
922	0	28870281	ref	NP_792900.1	alkyl hydroperoxide reductase, subunit C	Dechloromonas aromatica RCB	group 2	FFYPADFTFVCPTEVSTVHAAWHNTSPVLIAGLADRGDGGVGS
		28853528	gb	AAO96595.1	alkyl hydroperoxide reductase, subunit C	Pseudomonas syringae pv. tomato str. DC3000	group 1	
923	0	1351314	sp	P48822	TDX1 BRUMA Thioredoxin peroxidase 1 (Peroxiredoxin)	Bruglia malayi	group 1	VLAFFYPDLDFTFVCPTECSHSLAWIQTPRVGGIAGTGISYVRG
924	0	125773251	ref	XP_001357884.1	thioredoxin peroxidase 1	Drosophila pseudoobscura	group 1	VLGFFYPDLDFTFVCPTEVSVSHLAWCNDRNGVGGEGISLRG
		54637618	gb	EAL27020.1	GA19159-PA	Drosophila pseudoobscura	group 1	
925	0	77460742	ref	YP_350249.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Pseudomonas fluorescens PFO-1	group 1	VLVFFYPDLDFTFVCPSEVSIHNAWRNTPVNGGGIAGEVAFRG
926	0	115712104	ref	XP_794871.2	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Pseudomonas fluorescens PFO-1	group 1	CSGFFYPDLDFTFVCPTEVSHLAWINTPRQGGIAGVLAGVALRG
		115973522	ref	XP_001191584.1	PREDICTED: similar to mitochondrial truncated thioredoxin	Strongylocentrotus purpuratus	group 1	VLFFYPDLDFTFVCPTECSVTHLAWINIPREGGLIGHTLRG
927	0	157674503	gb	ABV60347.1	putative peroxiredoxin	Strongylocentrotus purpuratus	group 1	FFYPLDFTFVCPTEVSVHAWWNTIPRNGIGVLLPGLALRG
928	2.56E-15	44337083	gbj	BA240970.1	antigen	Entamoeba histolytica	group 1	LFYPADFTFVCPTEVSVHAWWNTIPRNGIGVLLPGLALRG
929	0	109096829	ref	XP_001097248.1	PREDICTED: peroxiredoxin 3 isoform 1	Micaca mullata	group 2	RIKAFKFINLEYPDLWTFVCPTEQLKYSVKGGVGGAGIARRG
		88779478	ref	ZP_011760955.1	putative alkyl hydroperoxide reductase, subunit C	Reinekea sp. MED297	group 3	LLTIGFFWPKDFTFVCPTEVLFVHFQWRRAQHEDEGVADRAVSV
931	4.65E-14	51173152	gb	AAO9522.2	30 kDa type I collagen binding protein	Entamoeba histolytica	group 1	VLVFFYPDLDFTFVCPTECSVSHLAWLNTPHAGVALRGDLGLG
932	0	118471486	ref	YP_889147.1	alkyl hydroperoxide reductase	Mycobacterium smegmatis str. MC2 155	group 1	FFYPLDFTFVCPTEVSVHAWWNTIPRNGIGVLLPGLALRG
		1408576	gb	AAC4148.1	alkyl hydroperoxide reductase C	Mycobacterium smegmatis str. MC2 155	group 2	LFYPADFTFVCPTEVSVHAWWNTIPRNGIGVLLPGLALRG
		1408578	gb	AAC44139.1	alkyl hydroperoxide reductase C	Mycobacterium smegmatis str. MC2 155	group 2	
933	0	145220123	ref	YP_001130832.1	alkyl hydroperoxide reductase	Mycobacterium smegmatis str. MC2 155	group 1	RIKAFKFINLEYPDLWTFVCPTEQLKYSVKGGVGGAGIARRG
		145206827	gb	ABP37330.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Prosthecochloris vibriiformis DSM 265	group 1	LLTIGFFWPKDFTFVCPTEVLFVHFQWRRAQHEDEGVADRAVSV
934	0	154248140	ref	YP_001419098.1	Peroxiredoxin	Xanthobacter autotrophicus Pw2	group 2	FFYPADFTFVCPTEVSTVHAWWNTIPRNGIGVLLPGLALRG
		154162229	gb	ABS69441.1	Peroxiredoxin	Xanthobacter autotrophicus Pw2	group 2	
935	2.35E-13	163776578	gb	EDQ90197.1	predicted protein	Monosiga brevicollis MX1	group 1	LFYPDLWTFVCPTEVSTVHAWWNTIPRNGIGVLLPGLALRG
936	2.29E-11	158148206	emb	CAP08909.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis	group 4	ISLFFYPKDFTFVCPTEVLTGTHSRWLAVARAGGIEGSLALRA
		158148208	emb	CAP08910.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148210	emb	CAP08911.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148212	emb	CAP08912.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148214	emb	CAP08913.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148216	emb	CAP08914.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148218	emb	CAP08915.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148220	emb	CAP08916.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148222	emb	CAP08917.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148224	emb	CAP08918.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148226	emb	CAP08919.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148228	emb	CAP08920.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148230	emb	CAP08921.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148232	emb	CAP08922.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148234	emb	CAP08923.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
		158148236	emb	CAP08924.1	Thio-Specific Antioxidant (TSA) Peroxidase	Chlamydia trachomatis		
937	0	158314123	ref	YP_001506631.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Frankia sp. EAN11pec	group 3	FFWPKDFTFVCPTEVSTVHAWRQNHSCVGLGDDGVAQRAVLID
		158109528	gb	AAU25726.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Frankia sp. EAN11pec	group 2	CFYPADEFVCPTEVSTVHKAWHDHSEVLSVGLADRGAGGIG
938	9.15E-17	52082573	ref	YP_081364.1	alkyl hydroperoxide reductase (small subunit)	Bacillus licheniformis ATCC 14580	group 2	
		52787968	ref	YP_083797.1	AhpC	Bacillus licheniformis ATCC 14580		
		52005784	gb	AAU25726.1	alkyl hydroperoxide reductase (small subunit)	Bacillus licheniformis ATCC 14580		
		52350470	gb	AAU43104.1	AhpC	Bacillus licheniformis DSM 13		

939	0118094468	ref	XP_001233893.1	PREDICTED: similar to natural killer cell enhancing factor	<i>Gallus gallus</i>				group 1	FFYPLDFTFVCPTECHLAWINTPKQGGGLVYLKEGIAYRGVSV
940	0149828023	ref	ZP_01916271.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Limnospira</i>	limnospira_05	MED105		group 2	FFYPADFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
941	04982322	11	EDM2443.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Limnospira</i>	limnospira_05	MED105		group 1	VLVSVFFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
942	021653667	11	AAIM62760.1	2-cys peroxiredoxin-like protein	<i>Arabidopsis thaliana</i>				group 1	FFYPMDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
943	0150384572	ref	ZP_01923257.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Vitellina vadenensis</i>	ATCC BAA-548			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
944	0150259018	11	EDM96266.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Vitellina vadenensis</i>	ATCC BAA-548			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
945	058377838	ref	XP_308081.2	thioredoxin-dependent peroxidase (AGAP011054-PA)	<i>Anopheles gambiae</i>	str. PEST			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
946	05246172	11	EAAG3855.3	thioredoxin-dependent peroxidase (AGAP011054-PA)	<i>Anopheles gambiae</i>	str. PEST			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
947	0124495008	11	ABN13585.1	thioredoxin peroxidase	<i>Antennaria franciscana</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
948	078096720	ref	XP_369489.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Burkholderia</i>	str. 383			group 3	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
949	077967465	11	ABB08845.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Burkholderia</i>	str. 383			group 3	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
946	7.55E-18	1244843332	emb	CAM32539.1	Peroxidoxin protein				group 2	MFYPADFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
947	0108563937	ref	XP_628253.1	alkyl hydroperoxidase reductase	<i>Helicobacter pylori</i>	HPAG1			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
948	0107837710	11	ABF68579.1	alkyl hydroperoxidase reductase	<i>Helicobacter pylori</i>	HPAG1			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
949	0109123569	ref	XP_001108989.2	PREDICTED: peroxidase 2 isoform 1	<i>Micacaca multata</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
949	071413207	ref	XP_808754.1	typreredoxin peroxidase	<i>Typanosoma cruzi</i>	strain CL Brener			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
950	070873021	11	EAN86903.1	typreredoxin peroxidase	<i>Typanosoma cruzi</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
950	071396508	ref	XP_802393.1	typreredoxin peroxidase, putative	<i>Typanosoma cruzi</i>	strain CL Brener			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
941	07403567	ref	XP_804571.1	typreredoxin peroxidase, putative	<i>Typanosoma cruzi</i>	strain CL Brener			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
942	071407508	ref	XP_806218.1	typreredoxin peroxidase	<i>Typanosoma cruzi</i>	strain CL Brener			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
943	07153771	11	AAF04974.1	typreredoxin peroxidase	<i>Typanosoma cruzi</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
944	07163771	11	AAF04974.1	typreredoxin peroxidase	<i>Typanosoma cruzi</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
945	07176134	emb	CAA09922.1	typreredoxin peroxidase homologue	<i>Typanosoma cruzi</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
946	070862626	11	EAN80947.1	typreredoxin peroxidase, putative	<i>Typanosoma cruzi</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
947	070867612	11	EAN8270.1	typreredoxin peroxidase, putative	<i>Typanosoma cruzi</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
948	070869897	11	EAN84367.1	typreredoxin peroxidase, putative	<i>Typanosoma cruzi</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
951	01034866122	ref	XP_6158683.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Springoplyx</i>	alaskensis RB2286			group 2	MGIGFFYPADFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
952	098976199	11	ABF52350.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Springoplyx</i>	alaskensis RB2286			group 2	MGIGFFYPADFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
952	0154337704	ref	XP_001562236.1	peroxidoxin	<i>Leishmania braziliensis</i>	MHOM/BR75/IM2904			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
953	04104346	11	AAAD2002.1	thioredoxin peroxidase	<i>Leishmania braziliensis</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
954	3.06E-10	166154817	ref	XP_001654935.1	thioredoxin peroxidase				group 4	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
955	016593308	emb	CAP04303.1	thioredoxin peroxidase	<i>Chlamydia trachomatis</i>	L29/UCH-1/Bu			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
956	0165931680	emb	CAP07257.1	thioredoxin peroxidase	<i>Chlamydia trachomatis</i>	L29/UCH-1/Bu			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
957	0117818506	ref	XP_856288.1	alkyl hydroperoxidase reductase subunit C	<i>Chlamydia trachomatis</i>	L29/UCH-1/proctitis			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
958	0117559913	11	ABK36861.1	alkyl hydroperoxidase reductase subunit C	<i>Chlamydia trachomatis</i>	L29/UCH-1/proctitis			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
959	0111223887	ref	XP_714681.1	alkyl hydroperoxidase reductase	<i>Chlamydia trachomatis</i>	L29/UCH-1/proctitis			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
960	0111151419	emb	CA163134.1	alkyl hydroperoxidase reductase	<i>Chlamydia trachomatis</i>	L29/UCH-1/proctitis			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
961	091783507	ref	XP_588713.1	putative alkyl hydroperoxidase reductase subunit C	<i>Plasmodium falciparum</i>	ATCC 7966			group 2	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
962	091687461	11	ABE30861.1	putative alkyl hydroperoxidase reductase subunit C	<i>Plasmodium falciparum</i>	ATCC 7966			group 2	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
963	074096113	ref	NP_001027810.1	peroxidoxin-like	<i>Ciona intestinalis</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
964	015134912	11	BAD38621.1	peroxidoxin-like	<i>Ciona intestinalis</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
965	0149200564	ref	XP_393445.2	PREDICTED: similar to thioredoxin peroxidase 1 CG	<i>Apis mellifera</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
966	0149136336	11	EDM2478.1	thioredoxin peroxidase	<i>Leishmania braziliensis</i>	ATCC 7966			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
967	08860465	ref	ZP_01135103.1	peroxidoxin 2	<i>Pseudomonas</i>	tunicata D2			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
968	0121595203	ref	XP_987099.1	alkyl hydroperoxidase reductase subunit C	<i>Acidovorax</i>	sp. JS42			group 2	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
969	0118482812	11	ABK3023.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Acidovorax</i>	sp. JS42			group 2	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
970	0148978075	ref	ZP_014814622.1	alkyl hydroperoxidase reductase c22 protein	<i>Populus trichocarpa</i>				group 1	ISSFFYPDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
971	0145862759	11	EDK28033.1	alkyl hydroperoxidase reductase c22 protein	<i>Vibrio</i>	cholerae SWAT-3			group 2	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
972	0113474135	ref	XP_720196.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Trichodesmium</i>	erythraeum IMS101			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
973	0110165183	11	ABG49723.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Trichodesmium</i>	erythraeum IMS101			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
974	046576851	11	Q9N198	PRDX_ASCSU Peroxiredoxin (A6Prx) [Thioredoxin peroxidase]	<i>Ascaris suum</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
975	06855466	11	BAA90476.1	thioredoxin peroxidase	<i>Ascaris suum</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
976	029150161	emb	CAD76624.1	alkyl hydroperoxidase reductase C22 protein	<i>Helicobacter pylori</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
977	029150179	emb	CAD79633.1	alkyl hydroperoxidase reductase C22 protein	<i>Helicobacter pylori</i>				group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
978	015859325	11	EDP31820.1	AhpC/Prx family protein	<i>Brugia malayi</i>				group 1	SSITLAFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
979	011995220	emb	CAC19677.1	peroxidoxin	<i>Chlamydomonas</i>	reinhardtii			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
980	014582684	11	AAK69837.1	peroxidoxin	<i>Chlamydomonas</i>	reinhardtii			group 1	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
981	049115354	ref	ZP_01842098.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Shewanella</i>	batlica OS223			group 2	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
982	0146664804	11	EDK50184.1	alkyl hydroperoxidase reductase/ Thiol specific antioxidant	<i>Shewanella</i>	batlica OS223			group 2	FFYPLDFTFVCPTEVSTHKAHADATEEGLALRGVLDQGVK
983	071032125	ref	XP_765704.1	2-Cys peroxidoxin	<i>Thelazia parva</i>	strain Muiguga			outlier	VFYPLDFTFVCPSEVLGSHKAWKELDVGGVSVSSSEGFHSRA

978	68352661.gb	EA33421.1	2-Cys peroxiredoxin, putative	<i>Theliera parva</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
979	60654143.gb	AA2X29764.1	peroxiredoxin 2	synthetic construct					group 1	VLGFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
980	126323578.ref	XP_001386408.1	PREDICTED: similar to MG82793 protein	<i>Monodelphis domestica</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	146082019.ref	XP_001464446.1	trypanredoxin peroxidase	<i>Leishmania infantum</i> JPCM5					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	14582662.gb	AA4K69586.1	AF312397.1 peroxidoxin 2	<i>Leishmania chagasi</i>						
	16751318.gb	AA2L5847.1	cytosolic peroxidoxin	<i>Leishmania infantum</i>						
981	3752763.ref	NP_931108.1	alkyl hydroperoxide reductase, small subunit (antioxidant)	<i>Photobacterium luminescens</i> subsp. <i>lummondii</i> T101					group 1	VLVNLKFFWPMDFTFVCPSEVHNWRKTPVGGIGAGVALRG
982	3.27E-15	16752263.gb	alkyl hydroperoxide reductase, small subunit (antioxidant)	<i>Photobacterium luminescens</i> subsp. <i>lummondii</i> T101					group 4	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
983	0	8163551.gb	antioxidant, AhpC/1 sa family	<i>Chlamydomonas reinhardtii</i> AhpC/1					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753829.pdb	Chain A, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753830.pdb	Chain B, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753831.pdb	Chain C, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753832.pdb	Chain D, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753833.pdb	Chain E, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753834.pdb	Chain F, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753835.pdb	Chain G, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753836.pdb	Chain H, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753837.pdb	Chain I, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	83753838.pdb	Chain J, Crystall Structure Of Alkyl Hydroperoxide-R	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
984	0	17864676.ref	thioredoxin peroxidase 2 CG1274-PA, isoform A	<i>Drosophila melanogaster</i>					group 1	VLLLFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	24656348.ref	thioredoxin peroxidase 2 CG1274-PB, isoform B	<i>Drosophila melanogaster</i>					group 1	VLLLFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	7230428.gb	AF-167099.1 thioredoxin peroxidase 2	<i>Drosophila melanogaster</i>					group 1	VLLLFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	12744787.gb	AF-321614.1 secretable thioredoxin peroxidase	<i>Drosophila melanogaster</i>					group 1	VLLLFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	7292296.gb	CG1274-PA, isoform A	<i>Drosophila melanogaster</i>					group 1	VLLLFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	16768228.gb	AA4F7704.1	<i>Drosophila melanogaster</i>					group 1	VLLLFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	23095360.gb	AA2L28333.1	<i>Drosophila melanogaster</i>					group 1	VLLLFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
985	1.31E-16	56421110.ref	YP_148428.1	<i>Drosophila melanogaster</i>					group 2	CFYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	56380952.dbl	BAD76860.1	<i>Drosophila melanogaster</i>					group 2	CFYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
986	6.01E-15	165902907.gb	EDR28610.1	<i>Geobacillus kaustophilus</i> HTA426					group 1	LFYPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
987	0	84354944.ref	ZP_00979838.1	<i>Enhanobea dispar</i> SAW760					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	107028881.ref	YP_729818.1	<i>Burkholderia cenocepacia</i> PC184					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	115351979.ref	YP_773818.1	<i>Burkholderia cenocepacia</i> AU 1054					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	116689861.ref	YP_835684.1	<i>Burkholderia ambifaria</i> AMMD					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	118709538.ref	ZP_01562119.1	<i>Burkholderia cenocepacia</i> H2424					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	105898045.gb	ABF-81003.1	<i>Burkholderia cenocepacia</i> MC0-3					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	115281967.gb	AB187484.1	<i>Burkholderia cenocepacia</i> AU 1054					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	116648050.gb	ABK08691.1	<i>Burkholderia ambifaria</i> AMMD					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	118652710.gb	EA159494.1	<i>Burkholderia cenocepacia</i> MC0-3					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	124872731.gb	EA164447.1	<i>Burkholderia cenocepacia</i> PC184					group 3	YFYPKDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
988	0	89092387.ref	ZP_01165341.1	<i>Burkholderia cenocepacia</i> PC184					group 2	FFYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	89083475.gb	EAR62693.1	<i>Oceanospirillum</i> sp. MED92					group 2	FFYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
989	0	54301431.gb	AA303170.1	<i>Oceanospirillum</i> sp. MED92					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
990	3.86E-14	165900036.gb	EDR26531.1	<i>Enhanobea dispar</i> SAW760					group 1	LFYPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
991	0	126305670.ref	XP_001363120.1	<i>Enhanobea dispar</i> SAW760					group 1	LFYPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
992	0	822969.gb	AAA98946.1	<i>Monodelphis domestica</i>					group 3	KGGLFFYPKDFTFVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
993	8.36E-20	6805338.ref	ZP_00539484.1	<i>Corynebacterium diphtheriae</i>					group 2	CFYYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	68008052.gb	EA087288.1	<i>Exiguobacterium sibiricum</i> 295-15					group 2	CFYYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
994	0	965473.gb	AAA74933.1	<i>Legionella pneumophila</i>					group 1	VLVFFYPLDFTVCPSEVSVTHLAWINTPREGLGVLKEGIAYRRG
995	4.53E-14	165898407.gb	EDR2570.1	<i>Enhanobea dispar</i> SAW760					group 1	LFYPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
996	0	54301409.gb	AAV33159.1	<i>Helicobacter pylori</i>					group 1	FFVPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
	0	54301413.gb	AAV33161.1	<i>Helicobacter pylori</i>					group 1	FFVPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
	0	54301421.gb	AAV33165.1	<i>Helicobacter pylori</i>					group 1	FFVPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
997	5.07E-14	67466737.ref	XP_649510.1	<i>Enhanobea histolytica</i> HM-1.IMSS					group 1	RIKAFKFINLEFPLDWTFCVPTTEQLKVSCHQAWCEADKKGVGTVGSRRG
998	0	166404129.ref	XP_001640260.1	<i>Nematostella vectensis</i>					group 1	FFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
999	0	166227393.gb	ED048197.1	<i>Nematostella vectensis</i>					group 1	FFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	164519504.pdb	2R1I	<i>Homo sapiens</i>					group 1	FFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	164519505.pdb	2R1I	<i>Homo sapiens</i>					group 1	FFYPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
1000	3.36E-14	509151111.ref	YP_061063.1	<i>Streptococcus pyogenes</i> MGAS10394					group 2	CFYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	50904185.gb	AA187900.1	<i>Streptococcus pyogenes</i> MGAS10394					group 2	CFYPADFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
1001	5.51E-13	108762609.ref	YP_629816.1	<i>Myxococcus xanthus</i> DK 1622					group 3	MLTVGVSLFAMPKDFTFVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	108468489.gb	ABF-91674.1	<i>Myxococcus xanthus</i> DK 1622					group 3	MLTVGVSLFAMPKDFTFVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
1002	0	15612536.ref	NP_224189.1	<i>Helicobacter pylori</i> J99					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	7387493.sp	P56876	<i>Helicobacter pylori</i> J100					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	499094.gb	AAA18984.1	<i>Helicobacter pylori</i> J101					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	4156103.gb	AAAD07055.1	<i>Helicobacter pylori</i> J99					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG
	0	54301407.gb	AAV33158.1	<i>Helicobacter pylori</i>					group 1	FFVPLDFTVCPTEVSVTHLAWINTPREGLGVLKEGIAYRRG

1003	0	91077388	ref	XP_014274.36	hypothetical protein GSPAT10030676001	<i>Tribolium castaneum</i>	group 1	FFYPLDFTFVCPTECVSHLAWMINTPREGGI.LGLHTLRGVLR
1004	0	113867474	ref	YP_725963.1	unmanned protein product	<i>Raistonia eutropha</i> H16	group 3	YFYPKDFTFVCPTEGGDFAVLGVKLAWRREHKGAVLRVSV
1005	0	113828260	emb	CAJ02956.1	Peroxiredoxin	<i>Raistonia eutropha</i> H16	group 1	VLGFFYPLDFTFVCPSEVSHNWRNTAVNGGIGAGVAFRG
1006	0	121590891	ref	ZP_01678214.1	antioxidant, AhpC/Tsa family	<i>Vibrio cholerae</i> 2740-80	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1007	1.19E-14	165904782	gb	AAU29515.1	natural killer cell enhancing factor	<i>Ichneumon punctatus</i>	group 1	LVVFFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1008	0	52630967	gb	AAU184947.1	hypothetical protein, conserved	<i>Enhanoeba dispar</i> SAW760	group 1	LVVFFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1009	0	148237771	ref	NP_011085485	putative cytosolic thioredoxin peroxidase	<i>Toxoptera cilirostris</i>	group 1	NLKFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
		49255979	gb	AAH72833.1	MGC80194 protein	<i>Xenopus laevis</i>		
		52078466	gb	AAH82463.1	MGC80194 protein	<i>Xenopus laevis</i>		
1010	7.17E-19	5163492	gb	AAF040685.1	AF157561.1 thioredoxin peroxidase 2	<i>Schistosoma mansoni</i>	group 1	VSTLYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1011	1.82E-14	546850154	gb	BAD66879.1	peroxiredoxin	<i>Enhanoeba mostikowskii</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1012	0	74272711	gb	ABA0115.1	chloplast thioredoxin peroxidase	<i>Chlamydomonas reinhardtii</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1013	1.38E-16	157122266	gb	EDO66406.1	hypothetical protein FTAG_00282	<i>Francisella tularensis</i> subsp. <i>holarctica</i> FSC022	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1014	0	156230721	gb	AAI52139.1	Zgc:110343 protein	<i>Danio rerio</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1015	0	152028582	gb	ABS23650.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Anaeromyxobacter</i> sp. Fw1 09-5	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1016	0	150003422	ref	YP_001298166	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Anaeromyxobacter</i> sp. Fw1 09-5	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1017	1.02E-15	15828102	ref	NP_302365.1	alkyl hydroperoxide reductase subunit C	<i>Bacteroides vulgatus</i> ATCC 8482	group 3	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1018	0	75765543	pdb	1YEX	alkyl hydroperoxide reductase	<i>Mycobacterium leprae</i> TN	group 2	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
		75765543	pdb	1YEX	alkyl hydroperoxide reductase	<i>Mycobacterium leprae</i> TN	group 3	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
		75765544	pdb	1YEX	alkyl hydroperoxide reductase	<i>Mycobacterium leprae</i> TN	group 2	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
		75765545	pdb	1YEX	alkyl hydroperoxide reductase	<i>Mycobacterium leprae</i> TN	group 2	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
		75765546	pdb	1YEX	alkyl hydroperoxide reductase	<i>Mycobacterium leprae</i> TN	group 2	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1019	9.84E-17	145482827	ref	XP_001427436	hypothetical protein GSPAT10030676001	<i>Paramecium tetraurelia</i> strain d4-2	group 1	LFYDFDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1020	0	124394517	emb	CAK60038.1	unmanned protein product	<i>Paramecium tetraurelia</i>	group 1	VSVELKFFYPLDFTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1021	0	109130180	ref	YP_001087492	PREDICTED: similar to Peroxiredoxin-4 (Prx-IV) (Thio)	<i>Micacaca mullata</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1022	0	19338954	gb	AAI86893.1	AF479023.1 putative alkyl hydroperoxide reductase	<i>Helicobacter pylori</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1023	0	34850269	emb	CAE47410.1	alkyl hydroperoxide reductase C22	<i>Helicobacter pylori</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
		34850271	emb	CAE47411.1	alkyl hydroperoxide reductase C22	<i>Helicobacter pylori</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
		34850273	emb	CAE47412.1	alkyl hydroperoxide reductase C22	<i>Helicobacter pylori</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1024	0	148981290	ref	ZP_01816350.1	alkyl hydroperoxide reductase C22 protein	<i>Vibrio natries bacterium</i> SWAT-3	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1025	0	145960922	gb	EDK26250.1	alkyl hydroperoxide reductase C22 protein	<i>Vibrio natries bacterium</i> SWAT-3	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1026	5.65E-18	118034007	ref	ZP_01505445.1	thioredoxin peroxidase	<i>Nicotiana tabacum</i>	group 2	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1027	0	117980240	gb	EAL194940.1	alkyl hydroperoxide reductase	<i>Burkholderia phyatumatum</i> STM815	group 1	VLEFFYPADYTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1028	0	15805962	ref	NP_213339.1	alkyl hydroperoxide reductase	<i>Burkholderia phyatumatum</i> STM815	group 1	VLEFFYPADYTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
		2983132	gb	AAO06735.1	alkyl hydroperoxide reductase	<i>Aquifex aeolicus</i> VF5	group 3	VSLFAWPKDFTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1029	2.78E-20	114649304	ref	XP_001141020	putative alkyl hydroperoxide reductase (subunit C) ox	<i>Raistonia pickettii</i> 12J	group 2	WSVIFMFAAFIFNCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1030	0	118578922	ref	YP_900172.1	alkyl hydroperoxide reductase	<i>Streptomyces coelicolor</i> A3(2)	group 1	FFYPLDFTFVCPTEVDSCHLAWMINTPRQGG.LVLEKEGIAYRG
1031	0	110597729	ref	ZP_01386013.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Raistonia pickettii</i> 12J	group 1	VMALFYPLDFTFVCPSEISVTHLAWMINTPRQGG.LVLEKEGIAYRG
1032	0	110340636	gb	EAL159116.1	putative alkyl hydroperoxide reductase (subunit C) ox	<i>Raistonia pickettii</i> 12J	group 2	VLEFFYPADYTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
		151578980	gb	EDNA3377.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Raistonia pickettii</i> 12D	group 2	FFYPADFTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1033	0	16328653	ref	YP_798373.1	Peroxiredoxin	<i>Enterobacter sakazakii</i>	group 1	VLGFFYPLDFTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1034	0	27807469	ref	NP_777188.1	peroxiredoxin 2	<i>Bos taurus</i>	group 1	FFYPLDFTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1035	7.89E-18	58269430	ref	XP_571871.1	thioredoxin-dependent peroxidoreductase	<i>Bos taurus</i>	group 1	VFPMDFTFVCPTEVSHLAWMINTPRQGG.LVLEKEGIAYRG
1036	0	78224377	ref	YP_386124.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Geobacter metallireducens</i> GS-15	group 1	VTKFFYPLDFTFVCPSEVSHLAWMINTPRQGG.LVLEKEGIAYRG
		78195632	gb	ABB33399.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Geobacter metallireducens</i> GS-15	group 1	VTKFFYPLDFTFVCPSEVSHLAWMINTPRQGG.LVLEKEGIAYRG

1037	0	71409504	ref	XP_807095.1	tryparedoxin peroxidase, putative	<i>Trypanosoma cruzi</i> strain CL Brener	outlier	KGLSRRANLNGKIQLFYPMDFTFYCPTEAFEDFKINQTVVSSC
		70871016	gb	EA6N5244.1	tryparedoxin peroxidase, putative	<i>Trypanosoma cruzi</i>	group 1	LFYPPDFTYCPTEVLGTLHAWLKTFRGGGGVYLYTGASLRG
1038	5.78E-16	145551454	ref	XP_001461404.1	hypothetical protein GSPA1T002635e4001	<i>Paramecium tetraurelia</i> strain d4-2	group 1	FFYPLDFTFVCPTEVSVHAWINPVLVLLAGLGLNGVVK
		124429238	emb	CAK94031.1	unnamed protein product	<i>Paramecium tetraurelia</i>	group 1	FFYPADFTFVCPTEVSVVHAWHRDEKYSKTLGALRGKTKLK
1039	0	21885578	gb	AA1M74564.1	antioxidant protein	<i>Mus musculus</i>	group 1	YSDFFYPLDFTFVCPTECHLAWISOPREGGLGEGVSFRGVKK
1040	0	163783929	ref	ZP_02178900.1	alkyl hydroperoxide reductase	<i>Hydrogenivirga</i> sp. 128-S-R1-1	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPITNGGIGAGVALRA
		159880797	gb	EDP74330.1	alkyl hydroperoxide reductase	<i>Hydrogenivirga</i> sp. 128-S-R1-1	group 1	FMFKDFTFVCPTEVSVHFAWIKNTPYKGGIGENALRGNMK
1041	0	58331972	ref	NP_0010111136	peroxidoxin 1	<i>Xenopus tropicalis</i>	group 1	CFYPAIDFVCPTEVSTVHKAWHDDSDVLGDGLAQRGADGIG
		54261560	gb	AA484184.1	peroxidoxin 1	<i>Xenopus tropicalis</i>	group 2	
1042	0	89271386	emb	CAJ82539.1	peroxidoxin 1	<i>Haemophilus influenzae</i> R2866	group 1	
		46132967	ref	ZP_00155972.2	COG0450: Peroxiredoxin	<i>Haemophilus influenzae</i> R2866	group 1	
		68248736	ref	YP_247848.1	probable peroxidoxin	<i>Haemophilus influenzae</i> 86-028NP	group 1	
		68056935	gb	AA8X7186.1	probable peroxidoxin	<i>Haemophilus influenzae</i> 86-028NP	group 1	
1043	0	54301423	gb	AAV33166.1	alkyl hydroperoxide reductase	<i>Helicobacter pylori</i>	group 1	
1044	3.46E-14	15675837	ref	NP_270011.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> M1 GAS	group 2	
		19748952	ref	NP_680088.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> MGAS8232	group 2	
		21911306	ref	NP_665574.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> MGAS315	group 2	
		28896679	ref	NP_803029.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> SSI-1	group 2	
		71904414	ref	YP_281217.1	peroxidoxin reductase (NAD(P)H)	<i>Streptococcus pyogenes</i> MGAS6180	group 2	
		71911581	ref	YP_283131.1	peroxidoxin reductase (NAD(P)H)	<i>Streptococcus pyogenes</i> MGAS5005	group 2	
		94989408	ref	YP_591509.1	peroxidoxin	<i>Streptococcus pyogenes</i> MGAS9429	group 2	
		94991343	ref	YP_599443.1	peroxidoxin	<i>Streptococcus pyogenes</i> MGAS10270	group 2	
		94993298	ref	YP_601397.1	peroxidoxin	<i>Streptococcus pyogenes</i> MGAS2096	group 2	
		139474526	ref	YP_001129242	alkyl hydroperoxide reductase subunit C	<i>Streptococcus pyogenes</i> str. Manfredo	group 2	
		13623068	gb	AAK34732.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> M1 GAS	group 2	
		19748203	gb	AAJ98587.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> MGAS8232	group 2	
		21905520	gb	AAAM0377.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> MGAS315	group 2	
		28811933	dbj	BAC64862.1	putative alkyl hydroperoxidase	<i>Streptococcus pyogenes</i> SSI-1	group 2	
		71803509	gb	AA872862.1	peroxidoxin reductase (NAD(P)H)	<i>Streptococcus pyogenes</i> MGAS6180	group 2	
		71854363	gb	AA252386.1	peroxidoxin reductase (NAD(P)H)	<i>Streptococcus pyogenes</i> MGAS5005	group 2	
		94542916	gb	ABF32965.1	peroxidoxin	<i>Streptococcus pyogenes</i> MGAS9429	group 2	
		94544851	gb	ABF34899.1	peroxidoxin	<i>Streptococcus pyogenes</i> MGAS10270	group 2	
		94546806	gb	ABF36853.1	peroxidoxin	<i>Streptococcus pyogenes</i> MGAS2096	group 2	
1045	0	71282444	ref	YP_270148.1	antioxidant, AhpC/Prx1 family	<i>Colwellia psycherythraea</i> 34H	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPVDGGGAGVAFRRG
		71148184	gb	AAZ29657.1	antioxidant, AhpC/Prx1 family	<i>Colwellia psycherythraea</i> 34H	group 1	FFYPLDFTFVCPTEVDSCHLAWINTPRQGGGLGVLEKGIATVRG
1046	0	3396899	dbj	BAA32086.1	natural killer cell enhancing factor	<i>Cyprinus carpio</i>	group 1	VLVFFYPLDFTFVCPSEVSIHNAWRNTPYKGGIGEGVALRGISS
		13365747	dbj	BAB39202.1	natural killer cell enhancing factor	<i>Cyprinus carpio</i>	group 1	
1047	0	16759300	ref	NP_454997.1	probable peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Typhi str. CT18	group 1	
		16763782	ref	NP_459397.1	putative thiol-alkyl hydroperoxide reductase	<i>Salmonella typhimurium</i> LT2	group 1	
		29142849	ref	NP_806191.1	probable peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Typhi Ty2	group 1	
		56414443	ref	YP_151518.1	probable peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi A str. ATCC 9150	group 1	
		62179014	ref	YP_215431.1	putative thiol-alkyl hydroperoxide reductase	<i>Salmonella enterica</i> subsp. enterica serovar Choleraesuis str. SC-B67	group 1	
		161615414	ref	YP_001589379	hypothetical protein SPAB_03185	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi B str. SPB7	group 1	
		25285289	pir	gi	ABO552, probable peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Typhi (strain CT18)	group 1	
		16418906	gb	AA119356.1	putative thiol-alkyl hydroperoxide reductase	<i>Salmonella typhimurium</i> LT2	group 1	
		16501671	emb	CAD08558.1	probable peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Typhi	group 1	
		29138461	gb	AAO70051.1	probable peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Typhi Ty2	group 1	
		56128700	gb	AAV78206.1	probable peroxidase	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi A str. ATCC 9150	group 1	
		62126647	gb	AA64350.1	putative thiol-alkyl hydroperoxide reductase	<i>Salmonella enterica</i> subsp. enterica serovar Choleraesuis str. SC-B67	group 1	
		161364778	gb	ABX68546.1	hypothetical protein SPAB_03185	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi B str. SPB7	group 1	
1048	2.44E-15	84998634	ref	XP_954538.1	2-cys peroxidoxin, putative	<i>Theileria annulata</i> strain Ankara	outlier	NLKVFFYPLDFTFVCPSEVSVSHKAWKELDYGGGGYSEGFSHRA
		65306536	emb	CAJ73861.1	2-cys peroxidoxin, putative	<i>Theileria annulata</i>	outlier	
1049	0	81917543	sp	G9UKY1	PRDX1, CRIGR Peroxiredoxin-1 (Thioredoxin peroxidase)	<i>Cricetulus griseus</i>	group 1	FFYPLDFTFVCPTEVDSCHLAWINTPKQGGGLGVLEKGISFRG
		69422333	gb	AAE32389.1	thioredoxin peroxidase II	<i>Cricetulus griseus</i>	group 1	
1050	4.56E-15	91214814	ref	ZP_01251787.1	putative thioredoxin peroxidase	<i>Psychotriplex torquus</i> ATCC 700755	group 4	VGKFWYPKDFTYCPTVEVHFAWLNTPKDGIEDNNTYRAYS
		91872411	gb	EAS73611.1	putative thioredoxin peroxidase	<i>Psychotriplex torquus</i> ATCC 700755	group 4	FFYPLDFTFVCPTEVSRVLAHLQWTLDRKGGGLGGVAYVRG
1051	0	146082084	ref	XP_001464443	tryparedoxin peroxidase	<i>Leishmania infantum</i> JPCM5	group 1	NMKFFYPMDFTFVCPTEVSTTHKAWINSTRIGDLAEQVALRG
		13406855	emb	CAJ66830.1	tryparedoxin peroxidase	<i>Leishmania infantum</i>	group 1	FFYPADFTFVCPTEVSTHAWINTPREGGLGVHLGVALRG
1052	0	56964193	ref	YP_175924.1	2-cys peroxidoxin	<i>Bacillus clausii</i> KSM-K16	group 1	
		56910436	dbj	BAD64963.1	2-cys peroxidoxin	<i>Bacillus clausii</i> KSM-K16	group 1	
1053	0	90416750	ref	ZP_01224680.1	alkyl hydroperoxide reductase c22 protein	marine gamma proteobacterium HT1	group 2	FFYPADFTFVCPTEVSTTHKAWHDSSEQGLADRGAEGVYK
		90331503	gb	EAS46739.1	alkyl hydroperoxide reductase c22 protein	marine gamma proteobacterium HTCC2207	group 2	FFYPADFTFVCPTECSVTHKRWLNITDKAGGVKYLDSGLSFRG
1054	1.65E-16	29840734	ref	NP_829840.1	antioxidant, AhpC/Prx1 family	<i>Chlamydomonas reinhardtii</i> cvaeae GPIC	group 4	VLVFFYPMDFTFVCPSEVSVHNAWRNTPYKGGIGAGVALRA
		29635064	gb	AAJ05716.1	antioxidant, AhpC/Prx1 family	<i>Chlamydomonas reinhardtii</i> cvaeae GPIC	group 4	FFYPADFTFVCPTEVSTHAWINTPREGGLGVHLGVALRG
1055	0	71892009	ref	YP_277739.1	alkyl hydroperoxide reductase C22 protein	<i>Candidatus Blochmannia pennsylvanicus</i> str. BPEIN	group 1	VLVFFYPMDFTFVCPSEVSVHNAWRNTPYKGGIGAGVALRA
		71799115	gb	AAZ40866.1	alkyl hydroperoxide reductase C22 protein	<i>Candidatus Blochmannia pennsylvanicus</i> str. BPEIN	group 1	FFYPLDFTFVCPTEVSTHAWINTPREGGLGVHLGVALRG
1056	0	10281259	gb	AAJ5506.1	AF301001_1 thioredoxin peroxidase 3	<i>Schistosoma mansoni</i>	group 1	FFYPLDFTFVCPTEVSTHAWINTPREGGLGVHLGVALRG
		10281265	gb	AAJ5506.1	AF301001_1 thioredoxin peroxidase 3	<i>Schistosoma mansoni</i>	group 1	FFYPLDFTFVCPTEVSTHAWINTPREGGLGVHLGVALRG
1057	0	71279436	ref	YP_271361.1	alkyl hydroperoxide reductase, subunit C	<i>Colwellia psycherythraea</i> 34H	group 2	FFYPLDFTFVCPTEVSTHAWINTPREGGLGVHLGVALRG
		71144517	gb	AAZ25649.1	alkyl hydroperoxide reductase, subunit C	<i>Colwellia psycherythraea</i> 34H	group 2	FFYPLDFTFVCPTEVSTHAWINTPREGGLGVHLGVALRG

1058	0	50751518	ref	XP_422437.1	PREDICTED: similar to natural killer cell enhancing factor	<i>Gallus gallus</i>		group 1	FFYPLDFTFVCPTEVDSCHLAWINPTKQGGI.GVYLKEGIAYRG
1059	0	29027461	gb	AA062417.1	PREDICTED: similar to natural killer cell enhancing factor	<i>Gallus gallus</i>		group 1	ARLSLQLFYLDFTFVCPSEVSVTHCAWTRTRTAPEGGIGVDK
1060	1.75E-19	71274707	ref	ZP_00650995.1	peroxiredoxin 3	<i>Toxoplasma gondii</i>		group 2	VLKVFYPADFTFVCPTEVSTSHKAWHDISPISGLADRGAEIG
		71899612	ref	ZP_00681767.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Xyella fastidiosa</i> Dixon			
		71164439	gb	EA014153.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Xyella fastidiosa</i> Amn-1			
		71730654	gb	EA032730.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Xyella fastidiosa</i> Amn-1			
1061	3.33E-12	4097710	gb	AA009623.1	30 kDa type I collagen binding protein	<i>Entamoeba histolytica</i>		group 1	RVKAFKKFNLFYPLDWTFCVPTTEQLKVSVAGIARRGDDGIG
1062	0	119389031	pdb	2C0D	A Chain A, Structure Of The Mitochondrial 2-Cys Peroxisomal	<i>Plasmodium falciparum</i>		group 1	VTKLFYPLNYTFVCGPTEISVSHLAWKNMFKGGIGNSFALRG
		119389032	pdb	2C0D	B Chain B, Structure Of The Mitochondrial 2-Cys Peroxisomal	<i>Plasmodium falciparum</i>			
1063	0	118618391	ref	YP_906723.1	alkyl hydroperoxide reductase C protein AhpC	<i>Mycobacterium ulcerans</i> Agy99		group 3	LLTIGFFWPKDFTFVCPTEVLGIDSVHFQWRAGHDDGVAADV
		118570501	gb	ABL05252.1	alkyl hydroperoxide reductase C protein AhpC	<i>Mycobacterium ulcerans</i> Agy99			
1064	0	23465199	ref	NP_695802.1	alkyl hydroperoxide reductase C22 protein	<i>Bifidobacterium longum</i> NCC2705		group 2	VLGFTYPADFTFVCPTEVSCYHKAWHIDANEDGVAERGNWTFG
		23526829	gb	AAAN24438.1	alkyl hydroperoxide reductase C22 protein	<i>Bifidobacterium longum</i> NCC2705			
1065	0	54301425	gb	AAU33167.1	alkyl hydroperoxide reductase	<i>Helicobacter pylori</i>		group 1	FFWPKDFTFVCPTEVSVHFVAWKNTPVYKGGIGEAIALRGNMK
1066	0	50120056	ref	YP_049223.1	probable peroxidase	<i>Erwinia carotovora</i> subsp. atroseptica SCRI1043		group 1	VLVNLKFFWPMDFTFVCPSEVHNARWTKPVKGGIGAGVALRG
1067	0	16123356	ref	NP_406669.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> CO92		group 1	VLVNLKFFWPMDFTFVCPSEVHNARWTKPVKGGIGAGVALRG
		22124895	ref	NP_688318.1	peroxidase	<i>Yersinia pestis</i> KIM			
		45440586	ref	NP_992125.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> biovar Microtus str. 91001			
		51595275	ref	YP_069486.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pseudotuberculosis</i> IP 32953			
		108808680	ref	YP_652596.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> Antiqua			
		108811058	ref	YP_646825.1	alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> Nepal516			
		145600088	ref	YP_001164164.1	alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> Pestoides F			
		149364960	ref	ZP_01868695.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> CA88-4125			
		153947559	ref	YP_001402086.1	antioxidant, AhpC/TSA family	<i>Yersinia pseudotuberculosis</i> IP 31758			
		162420648	ref	YP_001607730.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> Angola			
		165926641	ref	ZP_02222473.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> biovar Orientalis str. F1991016			
		165936007	ref	ZP_02224577.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> biovar Orientalis str. IP275			
		166011015	ref	ZP_02231913.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> biovar Antiqua str. E1979001			
		21957730	gb	JAAM84569.1	AE013702_8 putative peroxidase	<i>Yersinia pestis</i> KIM			
		45434543	gb	AA561002.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> biovar Microtus str. 91001			
		51588557	emb	CAH20165.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pseudotuberculosis</i> IP 32953			
		10874706	gb	ABG17225.1	alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> Nepal516			
		108780593	gb	ABG14654.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> Antiqua			
		115348835	emb	CAL21789.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> CO92			
		145211764	gb	ABP41191.1	alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> Pestoides F			
		149291373	gb	EDM41447.1	putative alkyl hydroperoxide reductase subunit c	<i>Yersinia pestis</i> CA88-4125			
		152959054	gb	ABS46515.1	antioxidant, AhpC/TSA family	<i>Yersinia pseudotuberculosis</i> IP 31758			
		162353463	gb	ABX87411.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> Angola			
		165916162	gb	EDR34759.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> Angola			
		165921569	gb	EDR38766.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> biovar Orientalis str. F1991016			
		165990015	gb	EDR42316.1	antioxidant, AhpC/TSA family	<i>Yersinia pestis</i> biovar Antiqua str. E1979001			
1068	0	67919045	ref	ZP_00512633.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Chlorobium limicola</i> DSM 245		group 1	VLVFFYPLDFTFVCPTECSVSHHAWLRTPKLGGIEAGVSLRG
		67783306	gb	EA042897.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Chlorobium limicola</i> DSM 245			
1069	1.67E-14	165903434	gb	EDR28974.1	hypothetical protein, conserved	<i>Entamoeba dispar</i> SA0760		group 1	LFYPLDWTFCVPTTEQLKVSVKGGVGTGYSRRGTGKDTQETIP
1070	0	77956920	ref	ZP_00820993.1	COG0450: Peroxiredoxin	<i>Yersinia bercowieri</i> ATCC 43970		group 1	VLVNLKFFWPMDFTFVCPSEVHNARWTKPVNGGIGAGVALRG
		77962934	ref	ZP_00826749.1	COG0450: Peroxiredoxin	<i>Yersinia moliereii</i> ATCC 43969			
1071	2.14E-18	89901016	ref	YP_523487.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Rhodoferrax ferrireducens</i> T118		group 2	VFYPADFTFVCPTEVSTAHKAWHDTSPVMVEGLALRGDNGIG
		89345763	gb	ABD69956.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Rhodoferrax ferrireducens</i> T118			
1072	1.72E-15	50426789	ref	XP_461992.1	hypothetical protein DEHA06:1154g	<i>Debaryomyces hansenii</i> CBS767		group 1	AFPLAFTFVCPTESSLAWTNVARDGGGLGVLLDGVVALRGVSS
		4965762	emb	CA60466.1	unnamed protein product	<i>Debaryomyces hansenii</i> CBS767			
1073	6.27E-16	69246516	ref	YP_00603919.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Enterococcus faecium</i> DO		group 2	CFYPADFTFVCPTECSLTHKAWHDTSDVLDGLAQRGADGIG
		68195246	gb	IEAN09700.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Enterococcus faecium</i> DO			

Hit#	p-value	gi number	db	protein accession	Name	Species	Crosshits [subfamily (p-value)]	Active Site Signature
1	0	6646878.gb	AAF2:1097.1	mitochondrial peroxidase	Dirofilaria immitis		IGKDFSHPRDFTPVCTTELLSCDSSHHRKVVDDIALTAR	
2	1.14E-12	85093072.ref	XP_959621.1	mitochondrial peroxidoredoxin PRX1	Neurospora crassa OR74A		FSHPEDYTPVCTTELLSANSHEGWINDIASTGRLPKO	
3	0	28921066.gb	EAA30385.1	peroxidase	Neurospora crassa OR74A		IGKLFSPHPRDFTPVCTTELLSCDDHKWSESDVPLTCR	
4	6.71E-14	68348727.gb	AAV96294.1	putative peroxidoredoxin	Arenicola marina	BCP (8.868E-09)	FAHPADFTPVCTSEFAHLAWVEAISATVRFVIDQEV	
5	0	58039044.ref	YP_191008.1	putative peroxidoredoxin	Glucobacter oxydans 621H		QEOPTFHPADFTPVCTTELLSADSHGKWKDIPFTIR	
6	0	58001458.gb	AAW60352.1	putative peroxidoredoxin	Glucobacter oxydans 621H		FSHPKNTFPVCTTELLSVDSSHAKWKGDINATVRQGED	
7	2.42E-15	86357421.ref	BAE63787.1	unnamed protein product	Aspergillus oryzae		QETVFSHPADFTPVCTTEMLSTDEHLKWIADVTAAR	
8	0	86281523.gb	ABC90586.1	probable anti-oxidant protein, AhpC/Tsa family	Rhizobium ellipticum CFN 42		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
9	0	39943569.ref	NP_947785.1	probable antioxidant protein	Rhizobium ellipticum CFN 42		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
10	0	39649361.emb	CAE27884.1	probable antioxidant protein	Rhodopseudomonas palustris CGA009		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
11	0	85715856.ref	XP_01046834.1	alkyl hydroperoxide reductase / Thiol specific antioxidant	Nitrobacter sp. Nb-311A		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
12	0	85697263.gb	EAO35143.1	alkyl hydroperoxide reductase / Thiol specific antioxidant	Nitrobacter sp. Nb-311A		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
13	0	109631648.gb	ABG35998.1	glutathione peroxidase	Helianthus annuus		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
14	0	109631650.gb	ABG35999.1	glutathione peroxidase	Helianthus annuus		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
15	0	86607615.ref	YP_476377.1	antioxidant, AhpC/Tsa family	Synechococcus sp. JA-2-3B/a(2-13)		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
16	0	86556157.gb	ABD01114.1	antioxidant, AhpC/Tsa family	Synechococcus sp. JA-2-3B/a(2-13)		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
17	0	75323225.sp	Q8E226	REHY_MEDTR 1-Cys peroxidoredoxin (Thioredoxin peroxidase)	Medicago truncatula		LEVDGKIFSHPGDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
18	0	49818729.gb	AA167997.1	1-cys peroxidoredoxin	Medicago truncatula		LEVDGKIFSHPGDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
19	0	120436673.ref	YP_862559.1	peroxidoredoxin	Gramella forsetii KT0803		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
20	0	117579023.emb	CAL67492.1	peroxidoredoxin	Gramella forsetii KT0803		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
21	0	70983971.ref	XP_747511.1	AhpC/Tsa family thioredoxin peroxidase, putative	Aspergillus fumigatus Af293		QEQPFSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
22	0	66845137.gb	EAL85473.1	AhpC/Tsa family thioredoxin peroxidase, putative	Aspergillus fumigatus Af293		QEQPFSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
23	3.14E-15	162694617.gb	EDQ80964.1	predicted protein	Physcomitrella patens subsp. patens		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
24	0	119720473.ref	YP_920968.1	Peroxidase	Thermophilum pendens Hrk 5		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
25	0	119525593.gb	ABL78965.1	1-Cys peroxidoredoxin / 3-Cys thioredoxin peroxidase	Thermophilum pendens Hrk 5		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
26	0	163719330.ref	XP_02127255.1	Peroxidoredoxin	Thermoproteus neutrophilus V2451a		LGMKFSHPGDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
27	0	162425553.gb	EDQ36101.1	Peroxidoredoxin	Thermoproteus neutrophilus V2451a		LGMKFSHPGDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
28	0	157757823.gb	XP_001671255.1	Hypothetical protein CBG01664	Caenorhabditis briggsae AF16		PGGVRILGKFPSPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
29	0	39587575.emb	CAE58513.1	Hypothetical protein CBG01664	Caenorhabditis briggsae		PGGVRILGKFPSPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
30	0	152986639.ref	YP_0013347061.1	probable antioxidant protein	Pseudomonas aeruginosa PA7		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
31	0	150961797.gb	ABR83822.1	probable antioxidant protein	Pseudomonas aeruginosa PA7		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
32	0	12044361.gb	AAG47822.1	antioxidant, AhpC/Tsa family	Drosophila melanogaster		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
33	0	57233665.ref	YP_182278.1	antioxidant, AhpC/Tsa family	Dehalococcoides ethenogenes 195		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
34	0	57224113.gb	AAW39170.1	antioxidant, AhpC/Tsa family	Dehalococcoides ethenogenes 195		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
35	0	148241485.ref	YP_001226642.1	Peroxidoredoxin	Synechococcus sp. RCC307		QLGDFSHPADYTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
36	0	147849795.emb	CAK27289.1	Peroxidoredoxin	Synechococcus sp. RCC307		QLGDFSHPADYTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
37	0	3334372.sp	O33665	TDXH2_SULME Probable peroxidoredoxin 2	Sulfolobus metallicus		FAHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
38	0	2257961.gb	AAB63198.1	alkyl hydroperoxide reductase/thiol-specific antioxidant h	Sulfolobus metallicus		FAHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
39	0	78189933.ref	YP_380271.1	peroxidoredoxin	Chlorobium chlorochromatii Cab3		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
40	0	78172132.gb	ABB29228.1	3-Cys thioredoxin peroxidase / 1-Cys peroxidoredoxin	Chlorobium chlorochromatii Cab3		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
41	0	126008698.ref	XP_01709270.1	hypothetical protein Faci_03000800	Ferroplasma acidimanus ter1		PEMDFSHPGDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
42	0	121531404.ref	XP_01664009.1	Peroxidase	Ralstonia pickettii 12D		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
43	0	153885968.ref	XP_02007124.1	Peroxidase	Ralstonia pickettii 12D		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
44	0	121301396.gb	EAX42369.1	Peroxidase	Ralstonia pickettii 12D		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
45	0	151577890.gb	EDN42290.1	Peroxidase	Ralstonia pickettii 12D		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
46	0	71065262.ref	YP_263989.1	putative alkyl hydroperoxide reductase	Psychrobacter arcticus 273-4		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
47	0	1038247.gb	AAZ18555.1	1-Cys peroxidoredoxin	Psychrobacter arcticus 273-4		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
48	0	109631596.gb	ABG35972.1	glutathione peroxidase	Helianthus annuus		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
49	0	109631598.gb	ABG35973.1	glutathione peroxidase	Helianthus annuus		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
50	0	84325747.ref	XP_00973779.1	COG0450: Peroxidoredoxin	Pseudomonas aeruginosa 2192		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
51	0	126195514.gb	EAZ59577.1	hypothetical protein PAZG_02865	Pseudomonas aeruginosa 2192		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
52	7.83E-16	83954867.ref	XP_009633545.1	probable antioxidant protein	Sulfitobacter sp. NAS-14.1		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
53	0	83940593.gb	EAP79765.1	probable antioxidant protein	Sulfitobacter sp. NAS-14.1		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
54	0	55251344.emb	CAH68896.1	novel protein (zgc:73360)	Danilo rerio		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
55	0	126359047.ref	XP_01716043.1	Peroxidase	Pseudomonas putida GB-1		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
56	0	126316292.gb	EAZ67291.1	Peroxidase	Pseudomonas putida GB-1		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
57	0	148707369.gb	EDI39316.1	mCG9402, isoform CRA_b	Mus musculus		TTIGRFSPHPRDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
58	0	94313058.ref	YP_586267.1	alkyl hydroperoxide reductase / Thiol specific antioxidant	Ralstonia metallidurans CH34		EGKIFSHPKDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
59	0	93356910.gb	ABF10938.1	alkyl hydroperoxide reductase / Thiol specific antioxidant	Ralstonia metallidurans CH34		EGKIFSHPKDFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
60	0	82703429.ref	YP_412995.1	Peroxidase	Nitrosospora multiformis ATCC 25196		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
61	0	82411494.gb	ABB75603.1	1-Cys peroxidoredoxin	Nitrosospora multiformis ATCC 25196		FSHPADFTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	
62	0	149374389.ref	XP_01892163.1	antioxidant, AhpC/Tsa family protein	Mairiobacter algicola DG683		LGDFSHPADYTPVCTTEFLSVDSHLAWRTTYGMIPLTIG	

39		149361092.gb	EDM49542.1	antioxidant, AhpC/Tsa family protein	Mairinobacter algicola DG893	FSHPADFTPVCITTEMLSDYGMLETAARVDPKPKKIRLI
	0	86141477.ref	ZP_01080023.1	antioxidant, AhpC/TSA family protein	Flavobacterium sp. MED217	
40	2.37E-16	853770396.gb	EAQ050491.1	antioxidant, AhpC/TSA family protein	Leeuwenhoekella blandensis MED217	FSHPADFTPVCITTEMLSDYGMLETAARVDPKPKKIRLI
41	0	163778162.gb	EQD091777.1	predicted protein	Monosiga brevicollis MX1	FSHPADFTPVCITTEMLSDYGMLETAARVDPKPKKIRLI
42	0	77461637.ref	YP_351144.1	Peroxidase	Pseudomonas fluorescens PFO-1	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
43	0	77385640.gb	ABA77153.1	1-Cys peroxiredoxin	Pseudomonas fluorescens PFO-1	
44	2.40E-15	72395188.gb	AAZ69461.1	3-Cys thioredoxin peroxidase	Meihausarcina bakeri str. Fusaro	QERAFSHPDDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
45	0	119415330.gb	EAW25268.1	antioxidant protein Lsfa	Necosartorya fischeri NRRL 181	
46	0	16373982.ref	ZP_02147228.1	Peroxidase	Neosartorya fischeri NRRL 181	FSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
47	0	161386855.gb	EDQ11217.1	Peroxidase	Phaeobacter gallaeciensis BS107	LSIGFSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
48	0	85716147.ref	ZP_01047122.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/	Phaeobacter gallaeciensis BS107	
49	0	85696980.gb	EAQ34863.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/	Nitrobacter sp. Nb-311A	FSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
50	0	126726063.ref	ZP_01741907.1	hypothetical protein RB2150_07663	Rhodobacteriales bacterium HTCC2150	FSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
51	0	126705289.gb	EBA04360.1	hypothetical protein RB2150_07663	Rhodobacteriales bacterium HTCC2150	FSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
52	0	145955186.ref	ZP_01804190.1	hypothetical protein CidJF_04001599	Clostridium difficile QCD-32958	FSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
53	4.01E-20	156082215.ref	XP_001608596.1	1-cys peroxidoxin, putative	Plasmodium vivax Sat-1	FSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
54	0	148801535.gb	EDL42934.1	1-cys peroxidoxin, putative	Plasmodium vivax	FSHPKDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
55	0	150021081.ref	YP_001308435.1	Peroxiredoxin	Thermosiphon melanesiensis BK429	QLGDFSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
56	0	149793602.gb	ABR31050.1	Peroxiredoxin	Thermosiphon melanesiensis BK429	FEADFSPHDDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
57	3.19E-15	108874897.gb	EAI139122.1	peroxiredoxin 6, prx-6	Aedes aegypti	TTTLRFSPHDDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
58	0	50545407.ref	XP_500241.1	hypothetical protein	Aedes aegypti	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
59	0	49646108.emb	CAG84179.1	unnamed protein product	Yarrowia lipolytica	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
60	1.06E-15	126138146.ref	XP_001385596.1	hypothetical protein PICST_73480	Yarrowia lipolytica CL1B122	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
61	0	126092874.gb	ABN67587.1	predicted protein	Pichia stipitis CBS 6054	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
62	0	17231896.ref	NP_488444.1	AhpC/TSA family protein	Nostoc sp. PCC 7120	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
63	0	17133540.djv	BAB76103.1	AhpC/TSA family protein	Nostoc sp. PCC 7120	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
64	0	6319407.ref	NP_009489.1	Mitochondrial peroxiredoxin (1-Cys Prx) with thioresdoxin	Saccharomyces cerevisiae	QLKRFSPHDDFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
65	0	465521.sp	P34227	PRX1_YEAST Mitochondrial peroxiredoxin PRX1 (Thioredoxin)	Saccharomyces cerevisiae	
66	0	313735.emb	CAA80784.1	YBL0524	Saccharomyces cerevisiae	
67	0	536101.emb	CAA84884.1	unnamed protein product	Saccharomyces cerevisiae	
68	0	151946332.gb	EDN64554.1	peroxiredoxin	Saccharomyces cerevisiae YJM789	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
69	0	48477449.ref	YP_023155.1	putative peroxiredoxin	Picrophilus torridus DSM 9790	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
70	0	56749759.sp	Q6L240	TDXH1_PICTO Probable peroxiredoxin 1	Picrophilus torridus DSM 9790	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
71	0	48430097.gb	AA142962.1	hypothetical alkyl hydroperoxide reductase	Picrophilus torridus DSM 9790	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
72	0	24652436.ref	NP_610584.2	CG12896 CG12896-PA, isoform A	Drosophila melanogaster	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
73	0	21627530.gb	AAF58796.2	CG12896-PA	Drosophila melanogaster	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
74	0	15606208.ref	NP_213585.1	alkyl hydroperoxide reductase	Aquifex aeolicus VF5	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
75	0	14285789.sp	O67024	TDXH_AQUAE Probable peroxiredoxin	Aquifex aeolicus VF5	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
76	0	2983402.gb	AAC06896.1	alkyl hydroperoxide reductase	Aquifex aeolicus VF5	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
77	0	12247762.gb	AAG50024.1	AF-327046_1 1-Cys peroxiredoxin	Triticum turgidum subsp. durum	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
78	1.66E-15	50424391.ref	XP_460782.1	hypothetical protein DEHA0F10593g	Debaromyces hansenii CBS767	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
79	0	49656451.emb	CAG89123.1	unnamed protein product	Debaromyces hansenii CBS767	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
80	0	114765512.ref	ZP_01444620.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/	Roseovarius sp. HTCC2801	YSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
81	0	114542105.gb	EAU45137.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/	Roseovarius sp. HTCC2801	
82	3.56E-15	77164811.ref	YP_343336.1	Peroxidase	Nitrosococcus oceanii ATCC 19707	YSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
83	3.71E-13	76883125.gb	ABA57806.1	1-Cys peroxiredoxin	Nitrosococcus oceanii ATCC 19707	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
84	0	67522471.ref	XP_659296.1	hypothetical protein AN1692.2	Aspergillus nidulans FGSC A4	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
85	0	40745656.gb	EAA64812.1	hypothetical protein AN1692.2	Aspergillus nidulans FGSC A4	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
86	0	116684140.gb	ABK06389.1	peroxiredoxin 6-related sequence 1	Mus famulus	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
87	0	119898954.ref	YP_934167.1	conserved hypothetical peroxiredoxin	Azoarcus sp. BH72	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
88	0	119671367.emb	CAL95280.1	conserved hypothetical peroxiredoxin	Azoarcus sp. BH72	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
89	2.10E-13	11139253.gb	AAG31645.1	AF312927_1 putative thiol-specific antioxidant protein 1	Ajeilomyces capsulatus	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
90	0	14161441.gb	AAK54753.1	AF372618_1 thiol-specific antioxidant	Ajeilomyces capsulatus	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
91	0	149707887.ref	XP_001496882.1	PREDICTED: similar to non-selenium glutathione phospho	Equus caballus	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
92	0	67154640.ref	ZP_00416385.1	Peroxidase	Equus caballus	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
93	0	67088775.gb	EAM08239.1	Peroxidase	Azotobacter vinelandii AVOP	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
94	0	146280610.ref	YP_001170763.1	antioxidant protein Lsfa	Azotobacter vinelandii AVOP	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
95	0	145568815.gb	ABP77921.1	antioxidant protein Lsfa	Pseudomonas stutzeri A1501	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
96	0	37958851.gb	AAP51115.1	putative antioxidant peroxidase	Pseudomonas stutzeri A1501	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
97	0	85704748.ref	ZP_01035849.1	thiol-specific antioxidant protein	uncultured bacterium	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
98	0	85670566.gb	EAQ25426.1	thiol-specific antioxidant protein	Roseovarius sp. 217	FSHPADFTPVCITTEFLSIDSHIAWIKRILKMDTQAVR
99	0				Roseovarius sp. 217	



73	0	21239416.gb	AAM44290.1	AF510851_1 glutathione peroxidase	<i>Aplysia californica</i>	FSHPADYTPVCTITELSCDSSHVGKVDLGMPLTAR
74	0	91082163.ref	XP_070660.1	PREDICTED: similar to CG3083-PA putative bifunctional protein: peroxidoxin/chitinase	<i>Tribolium castaneum</i>	FSHPADYTPVCTITELSCDTHKKWLNIDIDEKDLPTAR
75	0	126939037.ref	YP_001087934.1	putative bifunctional protein: peroxidoxin/chitinase	<i>Clostridium difficile</i> 630	FSHPGDFTPVCTITELSVDSLAWMYNITSYVROLLD
76	2.38E-14	150377081.ref	CAJ68298.1	peroxidase	<i>Clostridium difficile</i> 630	FSHPKNTFPVCTITELSVDSHTKWKNDIQLTARQGGD
77	0	150031629.gb	YP_001313677.1	Peroxidase	<i>Sinorhizobium medicae</i> WSM419	FSHPGDFTPVCTITELSCDSSHKEWIKDKKKASTGR
78	1.27E-15	109631674.gb	ABR63744.1	glutathione peroxidase	<i>Sinorhizobium medicae</i> WSM419	FSHPGDFTPVCTITELSCDSSHKEWIKDKKKASTGR
79	1.76E-19	114051564.ref	NP_001040104.1	glutathione peroxidase	<i>Helianthus annuus</i>	LKGFSPSDFTPVCTITELSCDSSHLEWCKDIPLTAR
80	0	15039244.ref	ABD36089.1	glutathione peroxidase	<i>Helianthus annuus</i>	SSHPRDFTVCTITELSIDDLHLSKDIKAEKDPETSR
81	0	14521246.ref	XP_001252820.1	PREDICTED: similar to non-selenium glutathione phosphoperoxidase	<i>Bos taurus</i>	FSHPGDFTPVCTITELSIDSHIKWVEWILGMITGTR
82	0	14285793.sp	NP_126721.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/ peroxidoxin	<i>Methanococcus vannielii</i> SB	QGKWFSPADFTPVCTITELSVDAHKWMEWITITAR
83	0	19423862.gb	Q8UZY4	TDXH_PYRAB Probable peroxidoxin	<i>Pyrococcus abyssi</i> GE5	LELDFSHPGDFTPVCTITELSCDSSHKEWIKDIASSTGR
84	7.52E-16	86141074.ref	CAB48952.1	Peroxidoxin	<i>Pyrococcus abyssi</i> GE5	FSHPKDFTPVCTITELSVDKHQAQWAEIDINGTVRQGGD
85	0	161825740.ref	AA188710.1	Thioredoxin peroxidase (AhpC, Alkyl hydroperoxide reductase)	<i>Bradyrhizobium</i> sp. BTA11	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
86	0	126665488.ref	YP_001059633.1	rehydridin	<i>Bradyrhizobium</i> sp. BTA11	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
87	2.43E-12	85710905.ref	EAQ51465.1	Peroxidase	<i>Leeuwenhoekella blandensis</i> MED217	FSHPADYTPVCTITELKLDLSVDSHKGWINDITLTVR
88	0	90423426.ref	YP_001580752.1	Peroxidase	<i>Burkholderia multivorans</i> ATCC 17616	FSHPADYTPVCTITELSVDSHHDWIKDITLTVRQLTD
89	0	16081592.ref	ABX16255.1	Peroxidase	<i>Burkholderia multivorans</i> ATCC 17616	FSHPADYTPVCTITELSVDSHHDWIKDITLTVRQLTD
90	0	146304289.ref	YP_001736470.1	antioxidant protein LsfA	<i>Mairiobacter</i> sp. ELB17	QKGFSPADYTPVCTITEMTVDAHKGWITATVRFID
91	0	157127965.ref	EBA00732.1	Peroxidoxin, AhpC/Tsa family protein	<i>Mairiobacter</i> sp. ELB17	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
92	0	57640472.ref	YP_001191966.1	Peroxidoxin, AhpC/Tsa family protein	<i>Idiomarina baltica</i> OS145	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
93	0	57158796.gb	EAQ33246.1	Peroxidase	<i>Idiomarina baltica</i> OS145	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
94	5.18E-18	94371589.ref	YP_531796.1	1-Cys peroxidoxin	<i>Rhodopseudomonas palustris</i> BisB18	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
95	0	146302744.ref	ABD87477.1	putative peroxidoxin	<i>Rhodopseudomonas palustris</i> BisB18	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
96	0	23126633.ref	NP_393951.1	peroxidoxin related protein	<i>Thermoplasma acidophilum</i> DSM 1728	FSHPADYTPVCTITELSVDSHKEWIKDIKATVRIGPD
97	0	150402347.ref	CAC11615.1	putative peroxidoxin	<i>Thermoplasma acidophilum</i>	FAHPADFTPVCTITELFEKLLSVDSHIAWLDIGLTVR
98	2.41E-18	150033377.gb	YP_001191605.1	1-Cys peroxidoxin	<i>Metatlospheara sedula</i> DSM 534	FSHPADFTPVCTITELFEKLLSVDSHIAWLDIGLTVR
99	0	146157162.gb	ABP95681.1	peroxidoxin 6, prx-6	<i>Metatlospheara sedula</i> DSM 5348	FSHPADFTPVCTITELHSVDCHVDVNDIFGMLAQTVR
100	0	148545506.ref	YP_001661250.1	peroxidoxin 6, prx-6	<i>Aedes aegypti</i>	FSHPADFTPVCTITELHSVDCHVDVNDIFGMLAQTVR
101	0	150402347.ref	EAT146535.1	putative peroxidoxin	<i>Aedes aegypti</i>	FSHPADFTPVCTITELHSVDCHVDVNDIFGMLAQTVR
102	0	150402347.ref	YP_182950.1	putative peroxidoxin	<i>Thermococcus kodakarensis</i> KO BCP (1.413E-09)	QKGFSPADFTPVCTITELSVDSHSHKMMEWITITAR
103	0	150402347.ref	Q5JF30	TDXH_PYRKO Probable peroxidoxin	<i>Thermococcus kodakarensis</i> KOD1	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
104	0	66048101.ref	BAD84726.1	Peroxidase	<i>Thermococcus kodakarensis</i> KOD1	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
105	0	63258808.gb	AA939904.1	Peroxidase	<i>Pseudomonas syringae</i> pv. syring BCP (8.076E-09)	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
106	0	94371589.ref	XP_001000802.1	PREDICTED: peroxidoxin 6, related sequence 2	<i>Pseudomonas syringae</i> pv. syringae B728a	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
107	0	94371589.ref	XP_357368.4	PREDICTED: peroxidoxin 6, related sequence 2	<i>Mus musculus</i>	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
108	0	146157162.gb	YP_001197336.1	Peroxidase	<i>Mus musculus</i>	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
109	0	23126633.ref	ABQ08016.1	Peroxidase	<i>Flavobacterium johnsoniae</i> UW101	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
110	0	150402347.ref	YP_001329641.1	peroxidoxin	<i>Flavobacterium johnsoniae</i> UW101	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
111	0	150403675.ref	YP_001330969.1	peroxidoxin	<i>Nostoc punctiforme</i> PCC 73102	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
112	0	150033377.gb	ABR65490.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
113	0	150033705.gb	ABR6618.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
114	0	71042808.pdb	2CV4	A Chain A, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
115	0	71042807.pdb	2CV4	B Chain B, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
116	0	71042808.pdb	2CV4	C Chain C, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
117	0	71042809.pdb	2CV4	D Chain D, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
118	0	71042810.pdb	2CV4	E Chain E, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
119	0	71042811.pdb	2CV4	F Chain F, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
120	0	71042812.pdb	2CV4	G Chain G, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
121	0	71042813.pdb	2CV4	H Chain H, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
122	0	71042814.pdb	2CV4	I Chain I, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
123	0	71042815.pdb	2CV4	J Chain J, Crystal Structure Of An Archaean Peroxidoxin	<i>Methanococcus maripaludis</i> C7	FSHPADFTPVCTITELSVDSHSHKMMEWITITAR
124	0	26986978.ref	NP_742403.1	antioxidant protein LsfA	<i>Pseudomonas putida</i> KT2440	FSHPADFTPVCTITELKLDLSVDSHSHKMMEWITITAR
125	0	24981593.gb	AA165887.1	antioxidant protein LsfA	<i>Pseudomonas putida</i> KT2440	FSHPADFTPVCTITELKLDLSVDSHSHKMMEWITITAR
126	0	148509564.gb	ABQ76424.1	1-Cys peroxidoxin	<i>Pseudomonas putida</i> F1	FSHPADFTPVCTITELKLDLSVDSHSHKMMEWITITAR
127	0	126664847.ref	YP_01735831.1	antioxidant, AhpC/Tsa family protein	<i>Mairiobacter</i> sp. ELB17	FSHPADYTPVCTITELSVDSHNDWAKDIKLTVRQGGD

101	0	126631173 gb	EBA01787.1	antioxidant_AhpC/Tsa family protein	Mairinobacter sp. ELB17	FSHPADFTPVCITTEFLSVDSHIAWVRNVTETVRQEMA
		147669967 ref	YP_001214785.1	Peroxiredoxin	Dehalococcoides sp. BAV1	
102	9.84E-20	146270919 gb	ABQ17907.1	3-Cys thioredoxin peroxidase	Dehalococcoides sp. BAV1	FSHPRDYTPVCITTEFLSVDSHIAWVRNVTETVRQEMA
		147902026 ref	NP_001082669.1	hypothetical protein LOC398641	Xenopus laevis	
103	0	32450305 gb	AAH54309.1	MGC64582 protein	Xenopus laevis	FSHPRDFTPVCITTEFFEKRSVDDHGKWKADISATVR
		69935523 ref	XP_00630459.1	Peroxidase	Paracoccus denitrificans PD1222	
		119385480 ref	YP_916536.1	Peroxidase	Paracoccus denitrificans PD1222	
104	0	119375247 gb	ABL70840.1	1-Cys peroxiredoxin	Paracoccus denitrificans PD1222	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		115473619 ref	NP_001060408.1	OS07g0638400	Onyza sativa (japonica cultivar-group)	
		158517779 sp	POC5D1	REHYB_ORYSJ1-Cys peroxiredoxin B (1-Cys Prx B) (Thiol-specific antioxidant)	Onyza sativa (japonica cultivar-group)	
		27261085 dbj	BAC45198.1	putative RAB24 protein	Onyza sativa (japonica cultivar-group)	
		113611944 dbj	BAF22322.1	Os07g0638400	Onyza sativa (japonica cultivar-group)	
		125601239 gb	EAZ40815.1	hypothetical protein OsJ_024298	Onyza sativa (japonica cultivar-group)	
105	0	163745454 ref	ZP_02152814.1	antioxidant_AhpC/Tsa family, putative	Oceanibulbus indolifex HEL-45	FSHPKDFTPVCITTEFISVDEHKKWKGDISATVRQLKL
		161382272 gb	EDQ06681.1	antioxidant_AhpC/Tsa family, putative	Oceanibulbus indolifex HEL-45	
106	0	149246165 ref	XP_001527562.1	mitochondrial peroxiredoxin PRX1	Lodderomyces elongisporus NRRL YB-4239	FSHPADYTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		146447506 gb	EDK41894.1	mitochondrial peroxiredoxin PRX1	Lodderomyces elongisporus NRRL YB-4239	
107	0	93005497 ref	YP_579934.1	Peroxidase	Psychrobacter cryohalobentis K5	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		92393175 gb	ABE74450.1	1-Cys peroxiredoxin	Psychrobacter cryohalobentis K5	
108	0	119487778 ref	ZP_01621287.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Lytngbya sp. PCC 8106	FSHPADYTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		119455611 gb	EAW36748.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Lytngbya sp. PCC 8106	
109	0	157336227 emb	CAO70912.1	unnamed protein product	Vitis vinifera	GLTLGFSDHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		84667749 gb	EAQ14217.1	thiol-specific antioxidant protein	Rhodobacteriales bacterium HTC22654	FSHPKDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		118594228 ref	ZP_01561573.1	rehydrin	Rhodobacteriales bacterium HTC22654	
		118440004 gb	EAV46631.1	rehydrin	Methylophilales bacterium HTCC2181	OQKFFSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
112	0	83951265 ref	ZP_00959998.1	thiol-specific antioxidant protein	Methylophilales bacterium HTCC2181	FSHPKDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		83839164 gb	EAP78460.1	thiol-specific antioxidant protein	Roseovarius nubinhibens ISM	
113	0	1710079 sp	P52571	REHY_BROSE Probable 1-Cys peroxiredoxin (Thioredoxin ORF)	Bromus secalinus	FSHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		17932 emb	CAA44884.1	ORF	Bromus secalinus	
114	0	152989769 ref	YP_001356491.1	alkyl hydroperoxide reductase	Nitratiruptor sp. SB155-2	NEKLFSPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		151421630 dbj	BAF69134.1	alkyl hydroperoxide reductase	Nitratiruptor sp. SB155-2	
115	0	116501810 gb	EAU84705.1	hypothetical protein CC1G_00224	Coprinopsis cinerea okayama#130	FSHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		134096292 ref	YP_001101367.1	putative peroxiredoxin	Herminiomonas arsenicoxydians	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		133740195 emb	CAL63246.1	putative peroxiredoxin	Herminiomonas arsenicoxydians	
117	0	118592466 ref	ZP_01549657.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Stappia aggregata IAM 12614	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		118434813 gb	EAV41463.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Stappia aggregata IAM 12614	
118	0	85708213 ref	ZP_01039279.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Erythrobracter sp. NAP1	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		85689747 gb	EAG29750.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Erythrobracter sp. NAP1	
119	0	45358737 ref	NP_988294.1	peroxiredoxin	Methanococcus maripaludis S2	FSHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		56749760 sp	Q6L.Y19	TDXH_ME1MP Probable peroxiredoxin	Methanococcus maripaludis S2	
		45047603 emb	CAF30730.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Methanococcus maripaludis S2	FSHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
120	0	109631652 gb	ABG36000.1	glutathione peroxidase	Helianthus annuus	FSHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		109631654 gb	ABG36001.1	glutathione peroxidase	Helianthus annuus	
121	0	66535082 ref	XP_624361.1	PREDICTED: similar to Peroxiredoxin 2540 CG11765-P	Apis mellifera	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
122	0	163811666 ref	ZP_02203350.1	Peroxidase	Dehalococcoides sp. VS	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		157404720 gb	EDO70756.1	Peroxidase	Dehalococcoides sp. VS	
123	0	146309339 ref	YP_001189804.1	Peroxidase	Pseudomonas mendocina ymp	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		145677540 gb	ABP87072.1	1-Cys peroxiredoxin	Pseudomonas mendocina ymp	
124	0	75070579 sp	Q9R7E0	PRDX6_PONPY Peroxiredoxin-6	Pongo pygmaeus	FSHPRDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		55731212 emb	CAH92320.1	hypothetical protein	Pongo pygmaeus	
125	0	109631600 gb	ABG35974.1	glutathione peroxidase	Helianthus annuus	FSHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		109631602 gb	ABG35975.1	glutathione peroxidase	Helianthus annuus	
126	0	59861147 gb	AAO09929.1	glutathione peroxidase	Aurelia aurita	FSHPADYTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
127	0	3219774 sp	O08709	PRDX6_MOUSE Peroxiredoxin-6 (Antioxidant protein 2)	Mus musculus	FSHPRDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		2072655 emb	CAA73383.1	nonseleium glutathione peroxidase	Mus musculus	
		2240033 gb	AAC53277.1	antioxidant protein 2	Mus musculus	
		30267702 gb	AAP21829.1	peroxiredoxin 6	Mus musculus	
		74212021 dbj	BAE40177.1	unnamed protein product	Mus musculus	
128	0	84319811 ref	ZP_00968200.1	COG0450: Peroxiredoxin	Pseudomonas aeruginosa C3719	FSHPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		126168335 gb	EAZ53846.1	hypothetical protein PACG_02384	Pseudomonas aeruginosa C3719	
129	0	75324900 sp	Q6W8Q2	REHY_WHEAT 1-Cys peroxiredoxin PER1 (Thioredoxin)	Triticum aestivum	FSHPGDFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA
		34539782 ref	AAQ74769.1	1-Cys peroxiredoxine	Triticum aestivum	
131	0	92116532 ref	YP_576261.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Nitrobacter hamburgensis X14	DVTPRFSPADFTPVCITTEFLSVDHSHKWKIDIDEKDLTAA

132		91799426 gb	ABE61801.1	1-Cys peroxiredoxin	Nitro bacter hamburgensis X14	FSHPADYTPVCTITELLVSDSHKGVNDIQLYDITLTVR
	0	78065379 ref	YP_368148.1	Peroxidase	Burkholderia sp. 383	
		77966124 gb	ABB07504.1	Peroxidase	Burkholderia sp. 383	FSHPADYTPVCTITELKIKDLVSDDDHGGWVKDKVTVR
133	0	83859653 ref	ZP_00953173.1	Peroxidase	Oceanicaulis alexandrii HTCC2633	
		83852012 gb	EAP89866.1	Peroxidase	Oceanicaulis alexandrii HTCC2633	
134	0	149636157 ref	XP_001515331.1	PREDICTED: hypothetical protein	Ornithorynchus anatinus	FSHPRDFTPVCTITELLSDDDLHAWCKDILGMLPLTVR
135	7.09E-13	66811836 ref	XP_640097.1	hypothetical protein DDBDRAFT_0204808	Dicystostellium discoideum AX4	VSHPKDFTPICITELLVSDDDHLEWWMKDKITFVRQLTD
		60468108 gb	EAL66118.1	AhpC/TSA family protein	Dicystostellium discoideum AX4	
136	0	15598646 ref	NP_252140.1	probable antioxidant protein	Pseudomonas aeruginosa PAO1	FSHPADFPVCTITELKIKDLVSDSHLKWIDDITLTVR
		107702984 ref	ZP_01366902.1	hypothetical protein PaerPA_01004053	Pseudomonas aeruginosa PACS2	
		9949591 gb	AAG06838.1	AE004765_11, probable antioxidant protein	Pseudomonas aeruginosa PAO1	
137	0	113868776 ref	YP_727265.1	Peroxiredoxin	Raistonia eutropha H16	FSHPADYTPVCTITELKIKDLVSDSHRQWIDDITLTVR
		113527552 emb	CAJ93897.1	Peroxiredoxin	Raistonia eutropha H16	
138	2.56E-14	50302365 ref	XP_451117.1	unnamed protein product	Kluveromyces lactis	QGKWFSPADFPVCTITELTNSHLRWIQQIDPLRAV
		49640248 emb	CAH02705.1	unnamed protein product	Kluveromyces lactis NRRL Y-1140	
139	0	118030221 ref	ZP_01501679.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phymatum STM815	FSHPADFPVCTITELLVSDSHNEWIKDIQLYDITLTVR
		117963988 gb	EAU98388.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phymatum STM815	
140	0	94496263 ref	ZP_0130284.1	Peroxidase	Sphingomonas sp. SKA58	FEADFSPKDFTPVCTITELLSVDDHGGWMMQDINATVR
		94424442 gb	EAT09465.1	Peroxidase	Sphingomonas sp. SKA58	
141	0	91777323 ref	YP_552531.1	Peroxidase	Burkholderia xenovorans LB400	FSHPADFPVCTITELLSDSHLAWLRSYGMLSSTVR
		91689983 gb	ABE3318.1	1-Cys peroxiredoxin	Burkholderia xenovorans LB400	FSHPRDFTPVCTITELLSDDLHAWKDKIVEKDPVTVR
142	0	50510361 dbj	BAD32166.1	mKAA0106 protein	Mus musculus	FSHPGDFTPVCTITELSDGHKIKWVEWILGMITGITIR
143	0	159905879 ref	YP_001549541.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Methanococcus maripaludis C6	
		159887372 gb	ABX02309.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Methanococcus maripaludis C6	
144	2.75E-14	116251768 ref	YP_767604.1	putative peroxidase	Rhizobium leguminosarum bv. viciae 3841	FSHPKNTFPVCTITELVSDSHAKWKNDINATVROGED
		115256414 emb	CAK07496.1	putative peroxidase	Rhizobium leguminosarum bv. viciae 3841	
145	0	156937253 ref	YP_001435049.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Ignicoccus hospitalis KIN41	FSHPADFPVCTITELVSDSHIKWKEWILGMLVTVR
		156566237 gb	ABU81642.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Ignicoccus hospitalis KIN41	
146	0	16028272 ref	NP_394414.1	putative peroxiredoxin	Thermoplasma acidophilum DSM 1728	FSHPGDFTPVCTITEFYKDLSDSHAWIRDIGATVR
		162448440 ref	YP_001610807.1	Probable peroxiredoxin	Sorangium cellulosum 'So ce 56'	FSHPKDFTPVCTITELLVSDSHKRSVSDITLTVRQLTD
147	0	161159022 emb	CAN90327.1	Probable peroxiredoxin	Sorangium cellulosum 'So ce 56'	
148	0	87124191 ref	ZP_01080040.1	alkyl hydroperoxide reductase	Synechococcus sp. RS9917	THGPRFSPADFPVCTITELFQFQDLSDAHLAWRNI
		86167763 gb	EAG069021.1	alkyl hydroperoxide reductase	Synechococcus sp. RS9917	
149	0	15922774 ref	NP_378443.1	putative peroxiredoxin	Sulfolobus tokodaii str. 7	QGKWFSPGDFTPVCTITELVSDSHIEVWMMWITSVTR
		23822254 sp	Q66XS5	TDX12_SJLT0 Probable peroxiredoxin 2	Sulfolobus tokodaii str. 7	
		15823565 dbj	BAB67552.1	212aa long hypothetical peroxiredoxin	Sulfolobus tokodaii str. 7	
150	9.27E-13	154246305 ref	YP_001417263.1	Peroxidase	Xanthobacter autotrophicus Py2	FSHPKNTFPVCTITELPEFDLSVDNHPAWVGDIATVR
		154160390 gb	ABS67606.1	Peroxidase	Xanthobacter autotrophicus Py2	
151	0	78186464 ref	YP_374507.1	peroxiredoxin	Peledicyon luteolum DSM 273	FSHPADYTPVCTITEFMSVDSHKKWVEWIQGKVAVTAL
		78166366 gb	ABB23484.1	3-Cys thioredoxin peroxidase / 1-Cys peroxiredoxin	Peledicyon luteolum DSM 273	
152	0	843566898 ref	ZP_00981730.1	COG0450: Peroxiredoxin	Burkholderia cenocepacia PC184	FSHPADYTPVCTITELLVSDSHKGVNDIQLYDITLTVR
		107021887 ref	YP_620214.1	Peroxidase	Burkholderia cenocepacia AU 1054	
		116688635 ref	YP_834458.1	Peroxidase	Burkholderia cenocepacia HI2424	
		118713703 ref	ZP_01566267.1	Peroxidase	Burkholderia cenocepacia MCO-3	
		105892076 gb	ABF75241.1	Peroxidase	Burkholderia cenocepacia AU 1054	
		116846824 gb	ABK07565.1	Peroxidase	Burkholderia cenocepacia HI2424	
		118848921 gb	EAV55722.1	Peroxidase	Burkholderia cenocepacia MCO-3	
		124870986 gb	EAY62702.1	Peroxidase	Burkholderia cenocepacia PC184	
153	0	91777335 ref	YP_552543.1	Peroxidase	Burkholderia xenovorans LB400	FSHPADFPVCTITELLVSDSHKWKIKDITLTVRQGGD
		91689993 gb	ABE33193.1	1-Cys peroxiredoxin	Burkholderia xenovorans LB400	
154	1.37E-14	162148432 ref	YP_001602893.1	putative peroxiredoxin	Glucacetobacter diazotrophicus PAI 5	FSHPKDFTPVCTITELLVSDSHSEWESDKVTVRQLTD
		161787009 emb	CAP56594.1	putative peroxiredoxin	Glucacetobacter diazotrophicus PAI 5	
155	0	124027125 ref	YP_001012445.1	Peroxiredoxin family	Hyperthermus butylicus DSM 5456	GEKFFSPADFPVCTITELVSDSHKIKWAEWITATVR
		123977819 gb	ABM80100.1	Peroxiredoxin family	Hyperthermus butylicus DSM 5456	
156	0	20860791 ref	NP_621962.1	Peroxiredoxin	Thermoanaerobacter tengcongensis MB4	FSHPADFPVCTITELLVSDSHKIKWVEWILGMITTVTR
		20515254 gb	AAM23566.1	Peroxiredoxin	Thermoanaerobacter tengcongensis MB4	
157	0	147918688 ref	YP_687589.1	1-cysteine peroxiredoxin	uncultured methanogenic archaeon RC-1	TGGDFSPADFPVCTITELLVSDSHIAWVRDIPHTQH
		110622985 emb	CAJ38263.1	1-cysteine peroxiredoxin	uncultured methanogenic archaeon RC-1	
158	0	84500700 ref	ZP_00988949.1	thiol-specific antioxidant protein	Oceanicola batsensis HTCC2597	FSHPKDFTPVCTITELFLADISVDDHKKWKGDISATVR
		84391653 gb	EAG03985.1	thiol-specific antioxidant protein	Oceanicola batsensis HTCC2597	
159	0	149326987 ref	ZP_01915245.1	thiol-specific antioxidant protein	Limnobacter sp. MED105	FSHPKDFTPVCTITELVSDHKKWKGDIIRTAAGQGD
		149824208 gb	EDM83428.1	thiol-specific antioxidant protein	Limnobacter sp. MED105	
160	0	116051470 ref	YP_789697.1	putative thiol-specific antioxidant protein	Pseudomonas aeruginosa UCBPPP-PA14	FSHPADFPVCTITELKIKDLVSDSHLKWIDDITLTVR
		115586691 gb	ABJ12706.1	putative thiol-specific antioxidant protein	Pseudomonas aeruginosa UCBPPP-PA14	

161	0	4139186 gb	AAD03716.1	1-Cys peroxiredoxin protein	Mus musculus	FSHPDRFPPVCTITTELLSIDDHLLAWSKDIKVEKDPVTAR
162	1.49E-11	56461442 ref	YP_156723.1	Peroxiredoxin, AhpC/Tsa family	Idiomarina lithiensis L2TR	FSHPADYTPVCTIEMLSITDAHKGWINDVQLYDIATVTR
163	0	56180452 gb	AAV83174.1	Peroxiredoxin, AhpC/Tsa family	Idiomarina lithiensis L2TR	PLTRRF-SHPADFTPVCTITTELLSANS-HDKWIKQIQEDL
164	3.73E-13	114192333 gb	EALU34035.1	mitochondrial peroxiredoxin PRX1	Aspergillus terreus NIH2624	FSHPEDYTPVCTITTELLSANS-HGGWKIDIASTGRQRTGD
165	0	154323320 ref	XP_001560974.1	conserved hypothetical protein	Botryotinia fuckeliana B05.10	FSHPKDFTPVCTITEFVSVDHDKKWKSDISATVSRQLKL
166	0	126740753 ref	ZP_01756438.1	thiol-specific antioxidant protein	Roseobacter sp. SK209-2-6	FSHPADFTPVCTITTELLHSVDHVDVWVNDIQKDKDQLTDR
167	0	17975518 ref	NP_523883.1	Peroxiredoxin 2540 CG11765-PA, isoform A	Drosophila melanogaster	FSHPKDFTPVCTITEFLADVSDVDDHKKWKGDISATVTR
168	0	7303750 gb	AAF56799.1	CG11765-PA	Drosophila melanogaster	FSHPDRFTPVCTITTELLSIDDHFWAWSKDIAEKDPVTAR
169	0	17945024 gb	AAAL48574.1	RE050093p	Drosophila melanogaster	FSHPADFTPVCTITTELLSIDDHFWAWSKDIAEKDPVTAR
170	5.45E-15	20151893 gb	AAAM11306.1	RH695986p	Drosophila melanogaster	FSHPKDFTPVCTITEFLADVSDVDDHKKWKGDISATVTR
171	0	56699207 ref	YP_168579.1	thiol-specific antioxidant protein	Silicibacter pomeroyi DSS-3	FSHPDRFTPVCTITTELLSIDDHFWAWSKDIAEKDPVTAR
172	0	56679944 gb	AAV96610.1	thiol-specific antioxidant protein	Silicibacter pomeroyi DSS-3	FSHPDRFTPVCTITTELLSIDDHFWAWSKDIAEKDPVTAR
173	0	16759348 ref	NP_446028.1	peroxiredoxin 6	Rattus norvegicus	FSHPADYTPVCTITTELLSVDSHKGVINDIQLYDITLTVR
174	0	5902791 sp	O35244	PRDX6_RAT Peroxiredoxin-6 (Antioxidant protein 2) (1-Cys)	Rattus norvegicus	FSHPKDFTPVCTITEFVSVDHDKKWKSDISATVSRQLKL
175	0	2317735 gb	AAB66341.1	acidic calcium-independent phospholipase A2	Rattus norvegicus	FSHPADFTPVCTITTELLHSVDHVDVWVNDIQKDKDQLTDR
176	0	3688521 emb	CAA76732.1	thiol-specific antioxidant protein	Rattus norvegicus	FSHPDRFTPVCTITTELLSIDDHLLAWSKDTAEKDPVTAR
177	0	149058259 gb	EDM09416.1	peroxiredoxin 6, isoform CRA_a	Rattus norvegicus	FSHPADFTPVCTITTELLSVDSHKGVINDIQLYDITLTVR
178	0	84360893 ref	ZP_00985580.1	COG0450: Peroxiredoxin	Burkholderia dolosa AUJ0158	FSHPADFTPVCTITTELLSVDHFWAWSKDIAEKDPVTAR
179	0	124895740 gb	EAY69620.1	Peroxiredoxin	Burkholderia dolosa AUJ0158	FSHPADFTPVCTITTELLSVDHFWAWSKDIAEKDPVTAR
180	0	149918867 ref	ZP_01907056.1	Peroxidase	Plesiocystis pacifica SIR-1	FSHPKDFTPVCTITTELLSVDHFWAWSKDIAEKDPVTAR
181	0	149820643 gb	EDM80055.1	Peroxidase	Plesiocystis pacifica SIR-1	FSHPDRFTPVCTITTELLSIDDHLLAWSKDTAEKDPVTAR
182	0	118597400 sp	O2PFL9	PRDX6_MACFA Peroxiredoxin-6	Macaca fascicularis	FSHPADFTPVCTITTELLSVDHFWAWSKDIAEKDPVTAR
183	0	84579335 gb	BAE73101.1	hypothetical protein	Macaca fascicularis	FSHPADFTPVCTITTELLSVDHFWAWSKDIAEKDPVTAR
184	0	14286184 sp	Q68146	TDXH_METUA Probable peroxiredoxin	Meihamococcus jamaaschii	FSHPADFTPVCTITTELLSVDHFWAWSKDIAEKDPVTAR
185	0	83855234 ref	ZP_00948764.1	thiol-specific antioxidant protein	Sulfitobacter sp. NAS-14.1	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
186	0	83843077 gb	EAP82244.1	thiol-specific antioxidant protein	Sulfitobacter sp. NAS-14.1	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
187	0	94502046 ref	ZP_01308551.1	Peroxidase	Oceanobacter sp. RED65	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
188	0	94425800 gb	EAT10803.1	Peroxidase	Oceanobacter sp. RED65	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
189	0	28210603 ref	NP_781549.1	peroxiredoxin	Clostridium tetani E88	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
190	0	28203043 gb	AAO35486.1	putative peroxiredoxin, alkyl hydroperoxide reductase C2	Clostridium tetani E88	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
191	0	119357758 ref	YP_912402.1	peroxiredoxin	Chlorobium phaeobacteroides DSM 266	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
192	0	119355107 gb	ABL65978.1	1-Cys peroxiredoxin / 3-Cys thioredoxin peroxidase	Chlorobium phaeobacteroides DSM 266	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
193	0	113478360 ref	YP_724421.1	Peroxidase	Trichodesmium erythraeum IMS101	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
194	0	110169408 gb	ABG53948.1	1-Cys peroxiredoxin	Trichodesmium erythraeum IMS101	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
195	0	134045457 ref	YP_001096943.1	peroxiredoxin	Meihamococcus maripaludis C5	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
196	0	132663082 gb	ABO34728.1	1-Cys peroxiredoxin / 3-Cys thioredoxin peroxidase	Meihamococcus maripaludis C5	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
197	0	94311588 ref	YP_584798.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Ralstonia metallidurans CH34	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
198	0	93355440 gb	ABF09529.1	1-Cys peroxiredoxin	Ralstonia metallidurans CH34	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
199	0	28393058 gb	AAO41963.1	putative peroxiredoxin	Arabidopsis thaliana	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
200	0	48310630 gb	AA141856.1	At1g48130	Arabidopsis thaliana	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
201	0	91781938 ref	YP_557144.1	Peroxidase	Burkholderia xenovorans LB400	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
202	0	91685892 gb	ABE29092.1	1-Cys peroxiredoxin	Burkholderia xenovorans LB400	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
203	0	85543926 gb	1X0R	A Chain A, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K1	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
204	0	85543927 gb	1X0R	B Chain B, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K2	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
205	0	85543928 gb	1X0R	C Chain C, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K3	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
206	0	85543929 gb	1X0R	D Chain D, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K4	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
207	0	85543930 gb	1X0R	E Chain E, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K5	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
208	0	85543931 gb	1X0R	F Chain F, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K6	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
209	0	85543932 gb	1X0R	G Chain G, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K7	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
210	0	85543933 gb	1X0R	H Chain H, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K8	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
211	0	85543934 gb	1X0R	I Chain I, Thioredoxin Peroxidase From Aeropyrum Per	Aeropyrum Permix K9	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
212	0	21623834 gb	BAC00970.1	thiol-specific antioxidant protein	Aeropyrum Permix K10	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
213	0	15843570 ref	NP_228616.1	peroxiredoxin	Pseudomonas putida	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
214	0	14285794 sp	Q9WZR4	TDXH_THEMA Probable peroxiredoxin	Thermotoga maritima MSB8	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
215	0	4981337 gb	AAD35689.1	AE001748_5 alkyl hydroperoxide reductase, putative	Thermotoga maritima MSB8	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
216	0	109631590 gb	ABG35969.1	glutathione peroxidase	Helianthus annuus	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
217	0	10180976 gb	AAAG14353.1	1-Cys peroxiredoxin	Plasmodium falciparum	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
218	0	76795465 ref	ZP_00777638.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Thermoanaerobacter ethanolicus ATCC 33223	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
219	0	114843769 ref	ZP_01454230.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Thermoanaerobacter ethanolicus X514	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR
220	0	76589273 gb	EAO65672.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Thermoanaerobacter ethanolicus ATCC 33223	FSHPADFTPVCTITTEFLSVDSHKGVINDIQLYDITLTVR

188	0	114806218.gb	EAU57998.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/	Thermoanaerobacter ethanolicus X514	FSHPADFTPVCTTEFLSIDSHKHWIEAWAEMLTNIVR
189	0	14286174.sp	O29969	TDXH_ARCFU Probable peroxidoredoxin	Archaeoglobus fulgidus	FSHPGDFTPVCTTEFLSVDSHIEWWIMWLGMITATVR
			159898905.ref	putative peroxidoredoxin	Sulfolobus solfataricus P2	
			3024725.sp	TDXH_SULSO Probable peroxidoredoxin	Sulfolobus solfataricus	
			P95895	orf c02015	Sulfolobus solfataricus	
			1707721.emb	CAA69447.1	Sulfolobus solfataricus	
			13815414.gb	AAK42300.1	Sulfolobus solfataricus P2	
190	0	162690525.gb	EDG76892.1	Peroxiredoxin, bacterioferritin comigratory protein homol predicted protein	Physcomitrella patens subsp. patens	FSHPNDFTPVCTTEFLSCNSHKGWADJFGMLPLTAR
191	0	149369961.ref	JP_01889812.1	antioxidant, AhpC/TSA family protein	unidentified eubacterium SCB49	SDFAKDKWIFSHPADFTPVCTTEMLSDYGMGLTA AVR
			149356452.gb	EDM45008.1	unidentified eubacterium SCB49	
192	0	121607854.ref	YP_995661.1	Peroxidase	Verminephrobacter eiseniae EF01-2	FSHPADFTPVCTTEFLVSDAHQHRVQDDITAVRQLTD
			121552494.gb	ABM56643.1	Verminephrobacter eiseniae EF01-2	
194	0	158517776.sp	POC5C8	REHYA_ORYS1 1-Cys peroxidoredoxin A (1-Cys Prx. A) (Th antioxidant protein Lsfa	Onyza sativa indica Group	GLTIGFHPGDFTPVCTTEFLSVDSHKWKWIKDIKDEK
195	1.69E-15	121707160.ref	XP_001271750.1	antioxidant protein Lsfa	Aspergillus clavatus NRRL 1	QERAF-SHPDDFTPVCTTEFLSANSHKAWIKDVGVTCP
			119399898.gb	EAW10324.1	antioxidant protein Lsfa	
			78357602.ref	YP_389051.1	alkyl hydroperoxide reductase	FSHPADYTPVCTTEFLSIDSHKHWVWDWILGMITNIVR
			78220007.gb	ABB39356.1	3-Cys thioredoxin reductase / 1-Cys peroxidoredoxin	
197	0	50285063.ref	XP_444960.1	hypothetical protein CAGLOA04433g	Desulfivibrio desulfuricans G20	SEKTF-SHPADF TPVCTTEMLSVESHHRKWIKDILTTVR
			49524262.emb	CAG57853.1	unamed protein product	
198	0	164888417.ref	JP_02212445.1	hypothetical protein CLOBAR_02062	Clostridium bartlettii DSM 16795	FSHPGDFTPVCTTEFLVSDHSLAWVYNTSTVYRALKD
			164602830.gb	EDQ96295.1	hypothetical protein CLOBAR_02062	
199	0	25990368.gb	AAW76502.1	AF320690_1 1-cys-peroxidoredoxin	Brassica napus	FSHPGDFTPVCTTEFLSVDSHKWKWIDVGPDSITGTR
200	0	114764220.ref	JP_01443458.1	thiol-specific antioxidant protein	Roseovarius sp. HTCC2801	FSHPKDFTPVCTTEFLQLADEHKKWKGDISATVRLSLD
			114543372.gb	EAU46388.1	thiol-specific antioxidant protein	FSHPADFTPVCTTEFLKDLSDVDSHKKWIDDIITFTVR
201	0	17545473.ref	NP_518875.1	PROBABLE ANTI-OXIDANT (PEROXIDASE) OXIDOREF	Ralstonia solanacearum GMI1000	
202	0	17427763.emb	CAD14284.1	probable antioxidant (peroxidase) oxidoreductase protein	Ralstonia solanacearum	FSHPKDFTPVCTTEFLSVDNHKGWAADITVTVRDGKGD
			148261930.ref	YP_001236057.1	Peroxidase	
			146403611.gb	ABO32138.1	1-Cys peroxidoredoxin	FSHPKDYTPVCTTEFLVSCDDHGHGWSEDEKDPDLTAR
203	5.41E-16	58332500.ref	NP_001011325.1	peroxidoredoxin 6	Acidiphilium cryptum JF-5	
			56789119.gb	AAH88077.1	Peroxiredoxin 6	FSHPGDFTPVCTTEFLSVDSHKWKWIDKDKDASTGR
204	0	109631616.gb	ABG35982.1	glutathione peroxidase	Helianthus annuus	
			109631618.gb	ABG35983.1	glutathione peroxidase	FSHPKDFTPVCTTEFLSVDSHKWKWIDKDKDASTGR
205	0	18313088.ref	NP_559755.1	peroxidoredoxin, probable	Pyrobaculum aerophilum str. IM2	CKKDF-SHPADF TPVCTTEFLSVDSHIEWKRWQINLTVR
			18160895.gb	AAI63937.1	peroxidoredoxin, probable	
207	0	149287196.gb	ABR23497.1	truncated peroxidoredoxin	Ornithodoros parkeri	FSHPADYTPVCTTEFLSVDSHKWKWIDKDKPLTAR
208	0	48477799.ref	YP_023505.1	putative peroxidoredoxin	Picrophilus torridus DSM 9790	LGKRF-SHPADF TPVCTTEFLSVDSHIEWLWLDIGNITVR
			56749759.sp	Q6L140	Picrophilus torridus DSM 9790	
			48430447.gb	AAT143312.1	hypothetical peroxidoredoxin	FSHPADYTPVCTTEFLSVDSHKWKWADJFGMLPLTAR
209	0	45201464.ref	NP_967034.1	AGR368Wp	Asibya gossypii ATCC 10895	PSTVLLRINF-SHPADF TPVCTTEFLQLKPKKHHWARDI
			44986398.gb	AAS54858.1	AGR368Wp	
210	0	163720271.ref	JP_02127832.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/	Thermotoga sp. RQ2	FSHPADFTPVCTTEFLSIDSHKHWIEWITNTVQREVYG
			161406275.gb	EDQ30482.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/	
211	0	14041708.emb	CAC38779.1	glutathione peroxidase	Thermotoga sp. RQ2	FSHPADFTPVCTTEFLSVDSHKWKWIDKDKPLTAR
			114327572.ref	YP_744729.1	peroxidase	QKQK-F-SHPKDF TPVCTTEFLSVDNIVTVRSDDAKKEQF
			114315746.gb	ABI61806.1	peroxidase	
213	0	18447388.gb	AAL68257.1	RE05501p	Drosophila melanogaster	FSHPADFTPVCTTEFLHSVDSDHVDVNDIQQKDPVLAT
214	0	109631668.gb	ABG36008.1	glutathione peroxidase	Helianthus annuus	FSHPGDFTPVCTTEFLSVDSHKWKWIDKDKDASTGR
			109631670.gb	ABG36009.1	glutathione peroxidase	
215	0	162688730.gb	EDQ75105.1	PREDICTED protein	Physcomitrella patens subsp. patens	FSHPNDFTPVCTTEFLSCNSHKGWADJFGMLPLTAR
216	0	15637218.ref	XP_784500.2	PREDICTED: similar to glutathione peroxidase, partial	Strongylocentrotus purpuratus	FSHPADYTPVCTTEFLSVDSHKWKWIDKDKDAL TAR
			115926010.ref	XP_001185732.1	PREDICTED: similar to glutathione peroxidase, partial	
217	0	156401378.ref	XP_001639268.1	predicted protein	Strongylocentrotus purpuratus	FSHPADYTPVCTTEFLSVDSHKWKWIDKDKPLTAR
			156226395.gb	EDQ47205.1	predicted protein	
218	0	163763176.gb	EDP83094.1	phosphoribosylformylglycinamide cyclase	Bacillus selenitireducens MLS10	QKQF-SHPADF TPVCTTEFLSVDSHIAWVRNV TETSAR
			160356444.gb	EDP83094.1	phosphoribosylformylglycinamide cyclase	
219	0	116624971.ref	YP_827127.1	Peroxidase	Solibacter usitatus Ellin6076	QQPIF-SHPKDF TPVCTTEFLSVDNHGKWAADINATVR
			116228133.gb	ABJ186842.1	Peroxidase	
220	0	83941756.ref	JP_00954218.1	thiol-specific antioxidant protein	Solibacter usitatus Ellin6076	FSHPKDFTPVCTTEFFEHKWKWGDISATVRQLKLSDD
			83847576.gb	EAP85451.1	thiol-specific antioxidant protein	
221	0	104779502.ref	YP_606000.1	Thiol-specific antioxidant protein Lsfa	Pseudomonas entomophila L48	FSHPADFTPVCTTEFLKDLSDVDSHKKWIDDIITLTVR
			96508489.emb	CAK13183.1	Thiol-specific antioxidant protein Lsfa	
222	0	120554333.ref	YP_958684.1	Peroxidase	Marinobacter aquaeolei VT8	LGDDF-SHPADYTPVCTTEFLSVSDSHNDWVKDQKTVTR
			120324182.gb	ABM18497.1	1-Cys peroxidoredoxin	
223	3.77E-13	156057945.ref	XP_001594896.1	mitochondrial peroxidoredoxin PRX1	Sclerotinia sclerotiorum 1980	FSHPEDYTPVCTTEFLSANSHGKWKDIASTGRQITGD
			154702489.gb	EDQ02228.1	mitochondrial peroxidoredoxin PRX1	

224	0	62287901.sp	Q8RCY5	TDXH1_THE1N Probable peroxidoxin 1	Thermoanaerobacter tengcongensis	FSHPADFTPVCITTEFLSVDSHHKWVWILGMIITNVR
225	0	125559318.gb	EAZ04852.1	hypothetical protein Osl_026084	Onyza sativa (indica cultivar-group)	GLTIGFHPGDFTPVCTTEFLSVDSHHKWIKIDKDK
226	3.97E-12	163775011.gb	EDQ88637.1	predicted protein	Monosiga brevicollis MX1	LSHPGDFTPVCTISELTLAARLSCDRHLEWKRQVQEMP
227	0	118618325.gb	YP_906657.1	alkyl hydroperoxide reductase C protein AhpC_1	Mycobacterium ulcerans Agv99	QGFIFSHPADFTPVCITSEFLSVDSHIAWLRITITGIR
228	0	118570433.gb	ABL05186.1	alkyl hydroperoxide reductase C protein AhpC_1	Mycobacterium ulcerans Agv99	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
229	0	154250120.gb	YP_001410945.1	Peroxiredoxin	Fervidobacterium nodosum R117-B1	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
230	0	154154056.gb	ABS61288.1	Peroxiredoxin	Fervidobacterium nodosum R117-B1	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
231	0	120404363.gb	AAQ47824.1	AF311880_1 1-cys peroxidoxin DPx-2540-2	Drosophila melanogaster	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
232	0	115350747.gb	YP_772586.1	Peroxidase	Burkholderia ambifaria AMMD	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
233	0	115280735.gb	ABI86252.1	Peroxidase	Burkholderia ambifaria AMMD	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
234	0	50083879.gb	YP_045389.1	putative antioxidant protein	Acinetobacter sp. ADP1	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
235	0	49529855.emb	CAG67567.1	putative antioxidant protein	Acinetobacter sp. ADP1	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
236	0	163956213.ref	YP_001630511.1	antioxidant protein	Bordetella petrii	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
237	0	163259941.emb	CAP42242.1	antioxidant protein	Bordetella petrii	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
238	0	153003356.ref	YP_001377681.1	Peroxidase	Anaeromyxobacter sp. Fw109-5	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
239	0	152026929.gb	ABS24697.1	Peroxidase	Anaeromyxobacter sp. Fw109-5	FSHPADFTPVCITTEFLSVDSHHKWVQWITNTRQELG
240	0	148501832.gb	ABO70086.1	Peroxiredoxin	Sphingomonas wittichii RW1	QIGDFSHPADFTPVCITSEFLSVDHGLWIRAIQVTVG
241	6.91E-13	119180473.ref	XP_001241702.1	1-Cys peroxidoxin	Sphingomonas wittichii RW1	QIGDFSHPADFTPVCITSEFLSVDHGLWIRAIQVTVG
242	0	90300489.gb	EAS30119.1	hypothetical protein CIMG_08865	Coccidioides immitis RS	GEIDFSDPDDFTPCTCTELLANSANSHDHWIKDIASGR
243	0	120553196.ref	YP_957547.1	Peroxidase	Coccidioides immitis RS	GEIDFSDPDDFTPCTCTELLANSANSHDHWIKDIASGR
244	0	120323045.gb	ABM17360.1	Peroxidase	Mairinobacter aquaeolei VT8	FSHPADFTPVCITTEFLSVDSHHKWIKIDISLTVR
245	0	41614986.ref	NP_963484.1	1-Cys peroxidoxin	Mairinobacter aquaeolei VT8	FSHPADFTPVCITTEFLSVDSHHKWIKIDISLTVR
246	0	56749769.sp	Q74NC6	hypothetical protein NEQ0191	Nanoarchaeum equitians Kin4-M	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
247	0	40068710.gb	AAR39045.1	TDXH_NANEQ Probable peroxidoxin	Nanoarchaeum equitians Kin4-M	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
248	0	110833569.ref	YP_692428.1	oxido-reductase	Nanoarchaeum equitians Kin4-M	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
249	0	110846680.emb	CAL16156.1	oxido-reductase	Alcanivorax borkumensis SK2	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
250	2.02E-18	58376628.ref	XP_308753.2	thioredoxin-dependent peroxidase (AGAP007020-PA)	Anopheles gambiae str. PEST	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
251	0	55245632.gb	EAA04146.2	thioredoxin-dependent peroxidase (AGAP007020-PA)	Anopheles gambiae str. PEST	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
252	0	114563153.ref	YP_750666.1	Peroxidase	Shewanella frigidimarina NCIMB 400	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
253	0	114334446.gb	ABI71828.1	Peroxidase	Shewanella frigidimarina NCIMB 400	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
254	0	158308632.gb	ABW30449.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Acaryochloris marina MBIC11017	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
255	0	42525530.ref	NP_970628.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Treponema denticola ATCC 35405	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
256	0	41815541.gb	AA510509.1	alkyl hydroperoxide reductase/peroxidoxin	Treponema denticola ATCC 35405	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
257	0	34206039.gb	AAC31902.1	Lsra	Pseudomonas putida	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
258	0	163857363.ref	YP_001631661.1	antioxidant protein	Bordetella petrii	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
259	0	163261091.emb	CAP43393.1	antioxidant protein	Bordetella petrii	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
260	0	15221082.ref	NP_175247.1	ATPER1 (Arabidopsis thaliana 1-cysteine peroxidoxin)	Arabidopsis thaliana	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
261	0	3122659.sp	O04005	REHY_ARATH1-Cys peroxidoxin PER1 (Thioredoxin P)	Arabidopsis thaliana	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
262	0	8778528.gb	AAF79536.1	AC023673_24 F2TD18.15	Arabidopsis thaliana	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
263	0	19226269.emb	CAA72804.1	peroxidoxin	Arabidopsis thaliana	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
264	0	70922647.ref	XP_734457.1	hypothetical protein PC300878.00.0	Plasmodium chabaudi	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
265	3.03E-18	56507214.emb	CAH84156.1	hypothetical protein PC300878.00.0	Plasmodium chabaudi	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
266	0	3318841.pdb	1PRX	A Chain A_Horfb A Novel Human Peroxidase Enzyme	Homo sapiens	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
267	0	3318842.pdb	1PRX	B Chain B_Horfb A Novel Human Peroxidase Enzyme	Homo sapiens	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
268	4.12E-17	109076440.ref	XP_001095722.1	PREDICTED: similar to Peroxidoxin-6 (Antioxidant protein)	Macaca mulatta	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
269	0	126458809.ref	YP_001055087.1	Peroxidase	Pyrobaculum caldifontis JCM 11548	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
270	0	126248530.gb	ABO07621.1	3-Cys thioredoxin peroxidase	Pyrobaculum caldifontis JCM 11548	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
271	0	113934138.ref	YP_01420039.1	Peroxidase	Caulobacter sp. K31	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
272	0	166229287.emb	CAK22382.1	non-selenium glutathione peroxidase	Caulobacter sp. K31	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
273	0	68552168.ref	YP_00591560.1	Peroxidase	Crossospora gigas	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
274	0	68240983.gb	EAN2352.1	Peroxidase	Prosthecochloris aestuarii DSM 271	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
275	0	126661298.ref	YP_017323368.1	rehydrin	Cyanothece sp. CCY0110	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
276	0	126617422.gb	EAZ86221.1	rehydrin	Cyanothece sp. CCY0110	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
277	2.10E-14	134733217.ref	NP_104784.1	similar to thiol-specific antioxidant enzyme such as rehydrin	Mesorhizobium loti MAFF303099	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
278	0	14023965.dbl	BAB50570.1	ml13745	Mesorhizobium loti MAFF303099	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
279	0	89056517.ref	YP_511968.1	Peroxidase	Jannaschia sp. CCS1	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
280	0	88866066.gb	ABD56943.1	1-Cys peroxidoxin	Jannaschia sp. CCS1	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
281	0	83748986.ref	YP_00945994.1	Peroxiredoxin	Ralstonia solanacearum UW551	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
282	0	83724324.gb	EAP71494.1	Peroxiredoxin	Ralstonia solanacearum UW551	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
283	0	149058260.gb	EDM09417.1	peroxidoxin 6, isoform CRA_b	Rattus norvegicus	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR
284	0	118038551.ref	YP_01509955.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phytofirmans PsJN	FSHPADFTPVCITTEFLSVDSHHKWIEWIGELTNTVR

260		117991214.gb	EAV05508.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/	Burkholderia phytofirmans PsJN			FSHPDRFTPVCTTELLSIDDHLAWSKDIAEKDPVTAR
	0	47586338.ref	NP_004896.1	peroxidoxin 6	Homo sapiens			
		114565483.ref	XP_524972.2	PREDICTED: peroxidoxin 6 isoform 2	Pan troglodytes			
		114621471.ref	XP_001143738.1	PREDICTED: similar to KIAA0106	Pan troglodytes			
		1718024.sp	P30041	PRDX6_HUMAN Peroxidoxin-6 (Antioxidant protein 2)	Homo sapiens			
		285949.gb	BAA03496.1	KIAA0106	Homo sapiens			
		23274223.gb	AAH35857.1	Peroxidoxin 6	Homo sapiens			
		31657160.gb	AAH53550.1	Peroxidoxin 6	Homo sapiens			
		56204402.emb	CAI20936.1	peroxidoxin 6	Homo sapiens			
		77744395.gb	ABB02185.1	peroxidoxin 6	Homo sapiens			
		119611350.gb	EAW90944.1	peroxidoxin 6, isoform CRA_a	Homo sapiens			
		119611351.gb	EAW90945.1	peroxidoxin 6, isoform CRA_a	Homo sapiens			
		158259727.gb	BAF82041.1	unnamed protein product	Homo sapiens			
261	7.48E-10	149202847.ref	ZP_01879818.1	Peroxidoxin, AhpC/Tsa family protein	Roseovarius sp. TM1035			SLRKTWKVLQGLTFSHPAAFTPVCTTEIALTASFLLD
		149143393.gb	EDM31429.1	peroxidoxin 6	Roseovarius sp. TM1035			
262	0	54303989.emb	CAH59743.1	peroxidoxin 6	Homo sapiens			TTVGRFSHPDRFTPVCTTELLSIDDHLAWSKDITTEKL
263	0	66521517.ref	XP_395319.2	PREDICTED: similar to Peroxidoxin-6 (Antioxidant protein 2)	Apis mellifera			FSHPNDFTPVCTTELLSCNSHRKWKIEDLGMPLMTAR
264	0	3789944.gb	AAC67563.1	1-Cys peroxidoxin protein 2	Mus musculus			FSHPDRFTPVCTTELLSIDDHLAWSKDIVEKDPVTAR
265	0	6671549.ref	NP_031479.1	peroxidoxin 6	Mus musculus			FSHPDRFTPVCTTELLSIDDHLAWSKDIVEKDPVTAR
		3719451.gb	AAC63376.1	1-Cys peroxidoxin	Mus musculus			
		15488685.gb	AAH13489.1	Peroxidoxin 6	Mus musculus			
		26326417.gb	BAC28952.1	unnamed protein product	Mus musculus			
		38174148.gb	AAH61181.1	Peroxidoxin 6	Mus musculus			
		74179990.gb	BAE36544.1	unnamed protein product	Mus musculus			
		74180578.gb	BAE34210.1	unnamed protein product	Mus musculus			
266	0	150400760.ref	YP_001324526.1	peroxidoxin	Methanococcus aeolicus Nankai-1			FSHPADFTPVCTTEFLSIDDHLKWIEWILGMVNNIVR
267	6.63E-16	163953238.ref	ABR55914.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/	Methanococcus aeolicus Nankai-3			PATERFSHPADFTPVCTSEFLSVDSHSLAWAHNIYGLM
		163664843.gb	ABY32210.1	Peroxidoxin	Methylobacterium extorquens PA1			
		91788241.ref	YP_549193.1	Peroxidase	Polaromonas sp. JS666			FSHPADFTPVCTTEFLSVDSHGKWWHDITATVRQLTD
		91697466.gb	ABE44295.1	1-Cys peroxidoxin	Polaromonas sp. JS666			FSHPGDFTPVCTTELLSCDSHKEWIKDIDEKANTGR
269	0	109631628.gb	ABG35988.1	glutathione peroxidase	Helianthus annuus			
		109631630.gb	ABG35989.1	glutathione peroxidase	Helianthus annuus			
		109631640.gb	ABG35994.1	glutathione peroxidase	Helianthus annuus			
		109631642.gb	ABG35995.1	glutathione peroxidase	Helianthus annuus			
270	0	47523870.ref	NP_989573.1	peroxidoxin 6	Sus scrofa			FSHPDRFTPVCTTELLSIDDHLAWSKDIAEKDPVTAR
		75074817.sp	Q9TSX9	PRDX6_PIG Peroxidoxin-6 (Non-selenium glutathione peroxidase)	Sus scrofa			
		6689393.emb	CAB65456.1	non-selenium glutathione phospholipid hydroperoxide peroxidase	Sus scrofa			
271	0	110639833.ref	YP_680043.1	peroxidoxin	Cytophaga hutchinsonii ATCC 33406			FSHPADYTPVCTTEFLFKRLSVDSHGKWKIKDIFTVR
		110282514.gb	ABG60700.1	peroxidoxin	Cytophaga hutchinsonii ATCC 33406			
272	0	121720168.ref	XP_001276782.1	AhpC/TSA family thioresoxin peroxidase, putative	Aspergillus clavatus NRRL 1			GEIDFSHPADFTPVCTTELLSADSHGDWVKDIPFTIR
		119404994.gb	EAW15356.1	AhpC/TSA family thioresoxin peroxidase, putative	Aspergillus clavatus NRRL 1			
273	0	1710077.sp	P52572	REHY_HORVU 1-Cys peroxidoxin PER1 (Thioresoxin)	Hordeum vulgare subsp. vulgare			FSHPGDFTPVCTTELLSICSDSHKEWTKDIDEKDLLTAA
		471321.emb	CAA54066.1	HVB15C	Hordeum vulgare subsp. vulgare			
		1694833.emb	CAA65387.1	peroxidoxin	Hordeum vulgare subsp. vulgare			
274	0	119859396.ref	ZP_01640811.1	Peroxidase	Pseudomonas putida W619			FSHPADFTPVCTTELLKLDLSDVSHHKWIEDITLTVR
		119814209.gb	EAX16970.1	Peroxidase	Pseudomonas putida W619			
275	0	146417033.ref	XP_001484486.1	hypothetical protein PGUG_03867	Pichia guilliermondii ATCC 6260			OQKIFSHPADFTPVCTTELLSHNDWIKDIVATVRLPID
		146391611.gb	EDK39769.1	hypothetical protein PGUG_03867	Pichia guilliermondii ATCC 6260			
276	7.47E-17	154282888.gb	AAK97814.1	AF209911_1 glutathione peroxidase	Ipodex scapularis			FSHPADYTPVCTTEFLSICSDSHRHWIKDIVEKDPDLCR
277	0	971280.gb	BAA09947.1	RAB24 protein	Oryza sativa ( Japonica cultivar-group)			GLTIGFSPGDFTPVCTTELLSICSDSHKDWKIDIDEKD
278	0	86750132.ref	YP_486628.1	Peroxidase	Rhodospseudomonas palustris Ha2			FSHPADFTPVCTTEMLSTDEHLKWAADVTAAVRQGED
		86573160.gb	ABD07717.1	1-Cys peroxidoxin	Rhodospseudomonas palustris Ha2			
279	0	82796374.gb	ABB91779.1	glutathione peroxidase	Hymenocidon perlevis			FSADFSPADYTPVCTTELLSHKGWIGDIAEKDPLTAR
280	0	25153708.ref	NP_741287.1	PerOxireDoXin family member (prdx-6)	Caenorhabditis elegans			FSHPADFTPVCTTELLSIDTHRDWAKDILGMICLSAR
		22532820.gb	AAM97968.1	Peroxidoxin protein 6	Caenorhabditis elegans			
281	0	14285791.sp	Q9HXX0	TDXH1_THEAC Probable peroxidoxin 1	Thermoplasma acidophilum			FSHPGDFTPVCTTEFLSVDSHHWEWVWILGMTSTVR
282	0	149241041.ref	XP_001479521.1	PREDICTED: similar to non-selenium glutathione peroxidase	Mus musculus			TTIGRFSHPDRFTPVCTTELLSIDDHLAWSKDIVEKSGKK
284	0	47193903.emb	CAF91861.1	unnamed protein product	Tetraodon nigroviridis			FSHPKDFTPVCTTELLSIDDHCSWSKDWLGMPLTAR
285	0	115422452.emb	CAJ48977.1	antioxidant protein	Bordetella avium 197N			FSHPADFTPVCTTELLSVDSHKQWIDDITLTVRQLTD
286	0	82540481.ref	XP_724555.1	1-cys peroxidoxin	Plasmodium yoelii str. 17XNL			FSHPNDFTPVCTTEFLSCNSHDKWIDIEKQDPLCR
		56967056.pdb	1XCC	A Chain A, 1-Cys Peroxidoxin From Plasmodium Yoelii	Plasmodium Yoelii			
		56967057.pdb	1XCC	B Chain B, 1-Cys Peroxidoxin From Plasmodium Yoelii	Plasmodium Yoelii			
		56967058.pdb	1XCC	C Chain C, 1-Cys Peroxidoxin From Plasmodium Yoelii	Plasmodium Yoelii			

				D Chain D, 1-Cys Peroxidoxin From Plasmodium Yoelli	Plasmodium Yoelli		
				1-cys peroxidoxin	Plasmodium yoelii yoelii		
				1-cys peroxidoxin	Plasmodium yoelii		
				putative alkyl hydroperoxide reductase	Janibacter sp. HTCC2649		FSHPADFTPVCITTEALADVSVDDHNAWKKDITEDAR
287	0	84496442	ref	putative alkyl hydroperoxide reductase	Janibacter sp. HTCC2649		FSHPADFTPVCITTEALADVSVDDHNAWKKDITEDAR
288	0	84383210	gb	putative alkyl hydroperoxide reductase	Janibacter sp. HTCC2649		FSHPADFTPVCITTEALADVSVDDHNAWKKDITEDAR
289	0	158309602	ref	peroxidase/ antioxidant protein	Acaryochloris marina MBIC11017		QLGDFSHFPADYTPVCTTEFLSVDSHGKGVNDIKVTVR
290	0	158309602	gb	peroxidase/ antioxidant protein	Acaryochloris marina MBIC11017		QLGDFSHFPADYTPVCTTEFLSVDSHGKGVNDIKVTVR
291	0	119873344	ref	Peroxidase	Pyrobaculum islandicum DSM 4184		LGWKF-SHPGDFTPVCTTEFLSVDSHIEWKROITATVR
292	2.78E-13	119874752	gb	3-Cys thioredoxin peroxidase	Pyrobaculum islandicum DSM 4184		LGWKF-SHPGDFTPVCTTEFLSVDSHIEWKROITATVR
293	0	91076594	ref	PREDICTED: similar to CG11765-PA	Tribolium castaneum		FSHPADFTPVCITTEFLHSCDDHVDVWVNDIQHKDALTVR
294	0	6850638	ref	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Peledicyon phaeocliathiforme BU-1		FSHPADFTPVCITTEFLHSCDDHVDVWVNDIQHKDALTVR
295	0	68242488	gb	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Peledicyon phaeocliathiforme BU-1		FSHPADFTPVCITTEFLHSCDDHVDVWVNDIQHKDALTVR
296	0	158420207	ref	AhpC/TSA family protein	Azorhizobium caulinodans ORS 571		FSHPADFTPVCITTEFLHSCDDHVDVWVNDIQHKDALTVR
297	0	158328896	gb	AhpC/TSA family protein	Azorhizobium caulinodans ORS 571		FSHPADFTPVCITTEFLHSCDDHVDVWVNDIQHKDALTVR
298	0	149927284	ref	thiol-specific antioxidant protein	Limnobacter sp. MED105		QGSFFSHPKDFTPVCITTEFLSVDEHKEWKWDIGRTAA
299	0	149823989	gb	thiol-specific antioxidant protein	Limnobacter sp. MED105		QGSFFSHPKDFTPVCITTEFLSVDEHKEWKWDIGRTAA
300	0	114327529	ref	peroxidoxin	Granulibacter beifresdensis CGDNIH1		FSHPADFTPVCITSEFLSVD/AHLAWRAIPHGVLEEML
301	0	114315703	gb	peroxidoxin	Granulibacter beifresdensis CGDNIH1		FSHPADFTPVCITSEFLSVD/AHLAWRAIPHGVLEEML
302	0	163744084	ref	thiol-specific antioxidant protein	Phaeobacter gallaeciensis 2.10		FSHPADFTPVCITTEFLSVDDHKKWKTDISATVROLKL
303	0	161382631	gb	thiol-specific antioxidant protein	Phaeobacter gallaeciensis 2.10		FSHPADFTPVCITTEFLSVDDHKKWKTDISATVROLKL
304	0	20092896	ref	peroxidoxin	Meihausarcina acetivorans C2A		QGMF-SHPADFTPVCITTEFLSIDSASHAWLRRTQAVR
305	0	19918204	gb	peroxidoxin (alkyl hydroperoxide reductase)	Methanosarcina acetivorans C2A		QGMF-SHPADFTPVCITTEFLSIDSASHAWLRRTQAVR
306	0	50897519	gb	putative peroxidoxin	Glossina morsitans morsitans		QGKIF-SHPGDTYTPVCTTEFLSCLDTHKGWIEDIPMTOR
307	0	116792331	gb	unknown	Picea sitchensis		QGKIF-SHPGDTYTPVCTTEFLSCLDTHKGWIEDIPMTOR
308	0	50897519	gb	putative peroxidoxin	Glossina morsitans morsitans		QGKIF-SHPGDTYTPVCTTEFLSCLDTHKGWIEDIPMTOR
309	0	145244929	ref	hypothetical protein An11g07650	Aspergillus niger		FSHPNDFTPVCITTEFLSCLDRHKAWIEDIKDSVTVAR
310	0	134079427	emb	unnamed protein product	Aspergillus niger		FSHPNDFTPVCITTEFLSCLDRHKAWIEDIKDSVTVAR
311	0	70733224	ref	probable antioxidant protein	Pseudomonas fluorescens Pf-5		PLTRRQEQF-SHPADFTPVCITTEFLSANSHDQWIDDI
312	0	68347523	gb	probable antioxidant protein PA3450	Pseudomonas fluorescens Pf-5		PLTRRQEQF-SHPADFTPVCITTEFLSANSHDQWIDDI
313	0	58260742	ref	thioredoxin peroxidase	Cryptococcus neoformans var. neoformans JEC21		FSHPADFTPVCITTEFLSANSHEGWIKDIYGMILPFTVR
314	0	134117465	ref	hypothetical protein CNBK3300	Cryptococcus neoformans var. neoformans B-3501A		FSHPADFTPVCITTEFLSANSHEGWIKDIYGMILPFTVR
315	0	50255243	gb	hypothetical protein CNBK3300	Cryptococcus neoformans var. neoformans B-3501A		FSHPADFTPVCITTEFLSANSHEGWIKDIYGMILPFTVR
316	0	57229862	gb	thioredoxin peroxidase, putative peroxidoxin	Cryptococcus neoformans var. neoformans JEC21		FSHPADFTPVCITTEFLSANSHEGWIKDIYGMILPFTVR
317	0	14591037	ref	peroxidoxin	Pyrococcus horikoshii OT3		QGKWF-SHPADFTPVCITTEFLSVDSHSHKIEWITITAR
318	0	14285788	sp	TDXH_PYROHO Probable peroxidoxin	Pyrococcus horikoshii OT3		QGKWF-SHPADFTPVCITTEFLSVDSHSHKIEWITITAR
319	0	3257634	gb	2 beta long hypothetical alkyl hydroperoxide reductase	Pyrococcus horikoshii OT3		QGKWF-SHPADFTPVCITTEFLSVDSHSHKIEWITITAR
320	0	126008323	ref	hypothetical protein Faci_03000959	Ferroplasma acidarmanus fer1		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
321	0	148269266	ref	peroxidoxin	Thermotoga petrophila RKU-1		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
322	0	147734810	gb	1-Cys peroxidoxin / 3-Cys thioredoxin peroxidase	Thermotoga petrophila RKU-1		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
323	0	114565485	ref	PREDICTED: peroxidoxin 6 isoform 1	Pan troglodytes		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
324	0	162460575	ref	1-Cys peroxidoxin antioxidant	Zea mays		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
325	0	146325682	sp	REHY_MAIZE 1-Cys peroxidoxin PER1 (Thioredoxin peroxidase)	Zea mays		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
326	0	87133468	gb	1-Cys peroxidoxin antioxidant	Zea mays		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
327	0	124007607	ref	peroxidase	Microscilla marina ATCC 23134		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
328	0	123986908	gb	peroxidase	Microscilla marina ATCC 23134		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
329	0	3024730	sp	TDXH_METTM Probable peroxidoxin	Methanothermobacter thermoautotrophicus BCP (7.083E-09)		LSIGF-SHPKDFTPVCTTEFLSKHLWVKDINQTVRQGD
330	0	620126	emb	orfk	Methanothermobacter thermoautotrophicus BCP (7.083E-09)		LSIGF-SHPKDFTPVCTTEFLSKHLWVKDINQTVRQGD
331	0	75675930	gb	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrobacter winogradskyi Nb-255		FSHPKNFTPICITTEFLSVDLHDAWAKDIYGMILNQTVR
332	0	74420800	gb	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrobacter winogradskyi Nb-255		FSHPKNFTPICITTEFLSVDLHDAWAKDIYGMILNQTVR
333	0	111219797	ref	Anti-oxidant protein, AhpC/TSA family.	Frankia alni ACN14a		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
334	0	111147329	emb	Anti-oxidant protein, AhpC/TSA family.	Frankia alni ACN14a		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
335	0	158315461	ref	Peroxidase	Frankia sp. EAN1pec		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
336	0	18810866	gb	Peroxidase	Frankia sp. EAN1pec		FSHPADFTPVCITTEFLSVDSHSHKIEWITITAR
337	0	156548610	ref	PREDICTED: similar to peroxidoxin	Nasonia vitripennis		FSHPADFTPVCITTEFLSVDDHVDVWVNDIEGKDTSTGR
338	0	62005080	gb	1-Cys peroxidoxin	Taiwanofungus camphoratus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
339	0	109631620	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
340	0	109631620	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
341	0	109631622	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
342	0	109631624	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
343	0	109631626	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
344	0	109631632	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
345	0	109631634	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
346	0	109631636	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
347	0	109631638	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD
348	0	109631644	gb	glutathione peroxidase	Helianthus annuus		FSHPGDFTPVCITTEFLHKKWVGDIPFIRFVIDQLGD



		109631646.gb	ABG35997.1	glutathione peroxidase	Helianthus annuus	FSHPDRYTPVCTTELLSIDDHLSGWSKDIKDPVTR
		109631656.gb	ABG36002.1	glutathione peroxidase	Helianthus annuus	
		109631658.gb	ABG36003.1	glutathione peroxidase	Helianthus annuus	
		109631660.gb	ABG36004.1	glutathione peroxidase	Helianthus annuus	
		109631662.gb	ABG36005.1	glutathione peroxidase	Helianthus annuus	
		109631676.gb	ABG36012.1	glutathione peroxidase	Helianthus annuus	
		109631678.gb	ABG36013.1	glutathione peroxidase	Helianthus annuus	
		109631680.gb	ABG36014.1	glutathione peroxidase	Helianthus annuus	
		109631682.gb	ABG36015.1	glutathione peroxidase	Helianthus annuus	
		109631684.gb	ABG36016.1	glutathione peroxidase	Helianthus annuus	
		109631686.gb	ABG36017.1	glutathione peroxidase	Helianthus annuus	
		109631688.gb	ABG36018.1	glutathione peroxidase	Helianthus annuus	
		109631690.gb	ABG36019.1	glutathione peroxidase	Helianthus annuus	
		109631692.gb	ABG36020.1	glutathione peroxidase	Helianthus annuus	
		109631694.gb	ABG36021.1	glutathione peroxidase	Helianthus annuus	
		109631698.gb	ABG36023.1	glutathione peroxidase	Helianthus annuus	
		109631704.gb	ABG36026.1	glutathione peroxidase	Helianthus annuus	
		109631706.gb	ABG36027.1	glutathione peroxidase	Helianthus annuus	
		109631708.gb	ABG36028.1	glutathione peroxidase	Helianthus annuus	
		109631710.gb	ABG36029.1	glutathione peroxidase	Helianthus annuus	
317	1.05E-19	148233654.ref	NP_001084316.1	peroxiredoxin 6	Xenopus laevis	
		32484266.gb	AAH54278.1	Prx6-prov protein	Xenopus laevis	
318	2.73E-12	162149893.ref	YP_001604054.1	putative peroxiredoxin protein	Glucacetobacter diazotrophicus PAI 5	
		161788170.emb	CAP57775.1	putative peroxiredoxin protein	Glucacetobacter diazotrophicus PAI 5	
319	0	33592121.ref	NP_879765.1	antioxidant protein	Bordetella pertussis Tohama 1	
		33597648.ref	NP_885291.1	antioxidant protein	Bordetella parapertussis 12822	
		33602427.ref	NP_889987.1	antioxidant protein	Bordetella bronchiseptica RB50	
		33571765.emb	CAE41266.1	antioxidant protein	Bordetella pertussis Tohama 1	
		33574076.emb	CAE38400.1	antioxidant protein	Bordetella parapertussis	
		33576866.emb	CAE33946.1	antioxidant protein	Bordetella bronchiseptica RB50	
320	0	118033595.ref	ZP_01505037.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Thiol specific antioxidant	Burkholderia phyatum STM1815	
		117980679.gb	EAU95075.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phyatum STM1815	
321	0	7381260.gb	AAF61460.1	AF139817_1 peroxiredoxin antioxidant	Brassica napus	
322	0	71024643.ref	XP_762551.1	hypothetical protein UM06404.1	Ustilago maydis 521	
		46101944.gb	EAK87177.1	hypothetical protein UM06404.1	Ustilago maydis 521	
323	0	99079916.ref	YP_612070.1	Peroxidase	Silicibacter sp. TM1040	
		99036196.gb	ABF62808.1	1-Cys peroxiredoxin	Silicibacter sp. TM1040	
324	8.07E-14	116200704.ref	XP_001226164.1	conserved hypothetical protein	Chaetomium globosum CBS 148.51	
		88175611.gb	EAG83079.1	conserved hypothetical protein	Chaetomium globosum CBS 148.51	
325	0	18977405.ref	NP_578762.1	peroxiredoxin	Pyrococcus furiosus DSM 3638	
		23822248.sp	Q8U218	TDXH_PYRFU Probable peroxiredoxin	Pyrococcus furiosus DSM 3638	
		18893092.gb	AA181157.1	alkyl hydroperoxide reductase	Pyrococcus furiosus DSM 3638	
326	0	109631592.gb	ABG35970.1	glutathione peroxidase	Helianthus annuus	
		109631594.gb	ABG35971.1	glutathione peroxidase	Helianthus annuus	
327	0	126464970.ref	YP_001040079.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Thiol specific antioxidant	Staphylothermus marinus F1	
		126013793.gb	ABN69171.1	1-Cys peroxiredoxin / 3-Cys thioredoxin peroxidase	Staphylothermus marinus F1	
328	0	89070989.ref	ZP_01158212.1	thiol-specific antioxidant protein	Oceanicola granulosa HTCC2516	
		89043452.gb	EAR49667.1	thiol-specific antioxidant protein	Oceanicola granulosa HTCC2516	
329	3.48E-13	85708202.ref	ZP_01039268.1	probable antioxidant protein	Erythrobacter sp. NAP1	
		856869736.gb	EAG29739.1	probable antioxidant protein	Erythrobacter sp. NAP1	
330	0	88792731.ref	ZP_01108449.1	alkyl hydroperoxide reductase	Alteromonas macleodii 'Deep ecotype'	
		88775781.gb	EAR07028.1	alkyl hydroperoxide reductase	Alteromonas macleodii 'Deep ecotype'	
331	2.06E-13	110636412.ref	YP_676620.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Thiol specific antioxidant	Mesorhizobium sp. BNC1	
		110287396.gb	ABG65455.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/Thiol specific antioxidant	Mesorhizobium sp. BNC1	
332	0	56751666.ref	YP_172367.1	antioxidant protein: rehydrin	Synechococcus elongatus PCC 6301	
		56866625.ubj	BAD79847.1	antioxidant protein: rehydrin	Synechococcus elongatus PCC 6301	
333	0	152981345.ref	YP_001355069.1	antioxidant protein LsfA	Janthinobacterium sp. Marseille	
		151281422.gb	ABR89832.1	antioxidant protein LsfA	Janthinobacterium sp. Marseille	
334	0	12229556.sp	O17433	1CPX_DIRIM 1-Cys peroxiredoxin (Thioredoxin peroxidase)	Dirofilaria immitis	
		2598122.gb	AA883998.1	1-cys peroxidoxin	Dirofilaria immitis	
335	0	125601238.gb	EAZ408.14	hypothetical protein OsJ_024297	Oryza sativa (japonica cultivar-group)	
336	2.15E-15	146412027.ref	XP_001481985.1	conserved hypothetical protein	Pichia guilliermondii ATCC 6260	
		146393492.gb	EDK41650.1	conserved hypothetical protein	Pichia guilliermondii ATCC 6260	
337	0	110589040.gb	ABG77029.1	peroxiredoxin 6	Ictalurus punctatus	

338	0	126306245	[ref]	XP_001368252.1	PREDICTED: similar to non-selenium glutathione phospho	Monodelphis domestica	FSHPDRFDPVCTTELLSIDDHLAWCKDILGMLPVTAR
339	0	15920801	[ref]	NP_376470.1	putative peroxiredoxin	Sulfolobus tokodaii str. 7	FYKDFAHPADFTPVCTTEFLSVDSHIQWMLDIPVIAD
		23822259	[sp]	Q87438	TDXH1_SULTO Probable peroxiredoxin 1	Sulfolobus tokodaii str. 7	
		15621585	[db]	BAB65579.1	215aa long hypothetical peroxiredoxin	Sulfolobus tokodaii str. 7	
340	0	159027193	[emb]	CAG086827.1	unnamed protein product	Microcystis aeruginosa PCC 7806	QLGDFSHPADYTPVCTTELLSVDSHRGWINDIINTVR
341	0	166043149	[gb]	ABK008392.1	peroxiredoxin 6-related sequence 1	Mus spicilegius	FSHPKDFTPVCTTELLSIDDHLAWSKDIWEKDKPLTAR
342	0	145590729	[ref]	YP_001152731.1	Peroxidase	Pyrobaculum arsenaticum DSM 13514	LGMQFSPHGDFTPVCTTEFLSVDSHSHWKRQIITVR
		145282497	[gb]	ABP50079.1	3-Cys thioredoxin peroxidase	Pyrobaculum arsenaticum DSM 13514	
343	0	91790663	[ref]	YP_551615.1	Peroxidase	Polaromonas sp. JS666	QGTVRFSPHKDFTPVCTTELLSVDNHTRWARDIQGHL
		91699888	[gb]	ABE46717.1	Peroxidase	Polaromonas sp. JS666	
344	0	126667741	[ref]	ZP_01738709.1	thiol-specific antioxidant protein	Mairinobacter sp. ELB17	DGKIFSHPKDFTPVCTTEFVSVDHVKWKRDISATVR
		126627844	[gb]	EAZ98473.1	thiol-specific antioxidant protein	Mairinobacter sp. ELB17	
345	0	66468789	[gb]	AAF21098.1	AF045165_1 thioredoxin peroxidase	Brugia malayi	IGKDFSHPRDFTPVCTTELLSDDSHRHWADDIAL TAR
346	2.70E-14	32140415	[gb]	AAP68995.1	thiol-specific antioxidant protein 3	Cryptococcus neoformans var. grubii	FSHPDDYTPVCTTELLSANSHEGWIKDIYGMILPFTVR
347	0	88603970	[ref]	YP_504148.1	Peroxidase	Methanospirillum hungatei JF-1	HGKLFSPADFTPVCTTEFLSIDSLSHLAWMNVTAAYR
		88189432	[gb]	ABD42429.1	3-Cys thioredoxin peroxidase	Methanospirillum hungatei JF-1	
348	0	202808569	[ref]	NP_623740.1	peroxiredoxin	Thermoanaerobacter tengcongensis MB4	FSHPGDFTPVCTTEFLSVDSHLAWVENIEDKDTSAVR
		6287900	[sp]	Q8R844	TDXH2_THE1N Probable peroxiredoxin 2	Thermoanaerobacter tengcongensis MB4	
		20517196	[gb]	AAI25344.1	Peroxiredoxin	Thermoanaerobacter tengcongensis MB4	
349	0	156059969	[ref]	XP_001595907.1	mitochondrial peroxiredoxin PRX1	Sclerotinia sclerotiorum 1980	PRTLRF-SHPADFTPVCTTELLKLDLSADSHKEWIKDI
		154699531	[gb]	EDN9269.1	mitochondrial peroxiredoxin PRX1	Sclerotinia sclerotiorum 1980	
350	0	126134331	[ref]	XP_001383690.1	hypothetical protein PICST_7026	Pichia stipitis CBS 6054	FSHPADFTPVCTTELLSHNQWIKDIFTVRFVLDGLAD
		126095639	[gb]	ABN65661.1	predicted protein	Pichia stipitis CBS 6054	IGKDFSHPRDFTPVCTTELLSDDSHSKWADDITLTAR
351	0	1717796	[sp]	P52570	TSA_ONCVO Putative peroxiredoxin (Thioredoxin peroxi	Onchocerca volvulus	
		903684	[gb]	AAC27392.1	thiol-specific antioxidant	Onchocerca volvulus	
352	0	160901880	[ref]	YP_001567461.1	alkyl hydroperoxide reductase/Thiol specific antioxi	Petrogala mobilis SJ95	LPKDFSHPGDFTPVCTTEFLSVDSHIKWMEWISATVR
		160359524	[gb]	ABX31138.1	alkyl hydroperoxide reductase/Thiol specific antioxi	Petrogala mobilis SJ95	
353	0	116754713	[ref]	YP_843833.1	Peroxidase	Meihanosaela thermophila PT	FSHPADFTPVCTTEFLSVDSHMKWTEWIL GMSINTVR
		116666164	[gb]	ABK15191.1	1-Cys peroxiredoxin / 3-Cys thioredoxin peroxidase	Meihanosaela thermophila PT	
354	0	158517778	[sp]	POC5D0	REHYB_ORYSI 1-Cys peroxiredoxin B (1-Cys Prx B) (Th	Onyza sativa (indica cultivar-group)	FSHPADFTPVCTTEFLSDDSHDKWIKDIDEKDLLTAA
		125559317	[gb]	EAZ04853.1	hypothetical protein Osl_026085	Onyza sativa (indica cultivar-group)	
355	0	116643144	[gb]	ABK06391.1	peroxiredoxin 6-related sequence 1	Mus macedonicus	FSHPKDFTPVCTTELLSDDHLAWSKDIWEKDKPLTAR
356	1.01E-13	461266317	[ref]	XP_387712.1	hypothetical protein F_G07536.1	Glibberella zeae PH-1	FSHPEDYTPVCTTELLSANSHEGWIKDIEVTGGDEKG
357	0	50309715	[ref]	XP_454866.1	unnamed protein product	Kluveromyces lactis	QTKSLRINFSPADFTPVCTTELLSHQWIKDIPPTVS
		49644004	[emb]	CAG99956.1	unnamed protein product	Kluveromyces lactis	
358	0	24581278	[ref]	NP_523463.2	Peroxiredoxin 6005 CG3083-PA, isoform A	Drosophila melanogaster	FSHPADFTPVCTTELLSDDSHDKWIKDIEKDKLLTAR
		7295884	[gb]	AAF51184.1	CG3083-PA	Bradyrhizobium japonicum USDA 110	FSHPKDFTPVCTTELLSVDHRHAKWSEDINQTVRQGED
359	0	27380419	[ref]	NP_771948.1	anti-oxidant protein	Bradyrhizobium japonicum USDA 110	FSHPADFTPVCTTELLSDDSHDKWIKDIEKDKLLTAR
		27353583	[db]	BAG50573.1	anti-oxidant protein	Bradyrhizobium japonicum USDA 110	
360	0	148653238	[ref]	YP_001280331.1	1-Cys peroxiredoxin	Psychrobacter sp. PRwf-1	FSHPADFTPVCTTELLSDDSHDKWIKDIEKDKLLTAR
		148572322	[gb]	ABO94381.1	1-Cys peroxiredoxin	Psychrobacter sp. PRwf-1	
361	0	12044363	[gb]	AAG47823.1	AF311879_1 1-cys peroxiredoxin DPx-2540-1	Drosophila melanogaster	FSHPADFTPVCTTELLSVDSHVDWWDIQQKDKQLTDR
362	0	145613040	[ref]	XP_362792.2	unnamed protein product	Aspergillus oryzae	QERAF-SHPDDFTPICTITTELEFARLSANSHKLWIKDI
363	3.41E-13	83769078	[db]	BAE59215.1	conserved hypothetical protein	Magnaporthe grisea 70-15	FSHPEDFTPVCTTELLSANSHDGWIKDIASTGROAKD
		145020105	[gb]	EDK04333.1	conserved hypothetical protein	Magnaporthe grisea 70-15	
364	2.46E-18	160877644	[pdb]	2E2M	A Chain A, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K1	QGKWFSPADFTPVTTTEFLVSDSHIKWKEWITHTVR
		160877645	[pdb]	2E2M	B Chain B, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K2	
		160877646	[pdb]	2E2M	C Chain C, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K3	
		160877647	[pdb]	2E2M	D Chain D, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K4	
		160877648	[pdb]	2E2M	E Chain E, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K5	
		160877649	[pdb]	2E2M	F Chain F, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K6	
		160877650	[pdb]	2E2M	G Chain G, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K7	
		160877651	[pdb]	2E2M	H Chain H, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K8	
		160877652	[pdb]	2E2M	I Chain I, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K9	
		160877653	[pdb]	2E2M	J Chain J, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K10	
		160877686	[pdb]	2NVL	A Chain A, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K11	
		160877687	[pdb]	2NVL	B Chain B, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K12	
		160877688	[pdb]	2NVL	C Chain C, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K13	
		160877689	[pdb]	2NVL	D Chain D, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K14	
		160877690	[pdb]	2NVL	E Chain E, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K15	
		160877691	[pdb]	2NVL	F Chain F, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K16	
		160877692	[pdb]	2NVL	G Chain G, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K17	
		160877693	[pdb]	2NVL	H Chain H, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K18	
		160877694	[pdb]	2NVL	I Chain I, Crystal Structure Of Archaeal Peroxiredoxin,	Aeropyrum Perimix K19	

365		160877695.pdb	2NVL	J Chain J. Crystal Structure Of Archaeal Peroxiredoxin, 1	Aeropyrum Permix K20				FSHPKDFTPVCTITELLSVDKHRDHWATDINGITVROGGDD
	0	111023898.ref	YP_706870.1	probable peroxiredoxin	Rhodococcus sp. RHA1				
366		110823428.gb	ABG98712.1	probable peroxiredoxin	Rhodococcus sp. RHA1				
	0	13472213.ref	NP_103780.1	probable antioxidant protein	Mesorhizobium loti MAFF303099	BCP (6.741E-09)			FSHPKDFTPVCTITELPEFVLSVDRHAGWADDIPATAG
367		14022958.gb	BAB49566.1	probable antioxidant protein	Mesorhizobium loti MAFF303099				
368		68161053.gb	AAV186958.1	peroxiredoxin 6	Ictiurus punctatus				
	0	87301405.ref	XP_01084246.1	rehydrin	Synechococcus sp. WH 5701				QLGDFSHPADYTPVCTITELLSVDSHKGWIGDMLTVR
	0	87284373.gb	EAQ76326.1	rehydrin	Synechococcus sp. WH 5701				
369		16768422.gb	AAI28430.1	GM04289p	Drosophila melanogaster				FSHPADFPTVCTITELSCDSHKGWIEDIFGKLPKLTCTR
370		149378458.ref	XP_01896148.1	antioxidant protein LsfA	Marinobacter algicola DG893				FSHPADFPTVCTITELKDLSDVSHKWEIKDILTIVR
	0	149357260.gb	EDM45792.1	antioxidant protein LsfA	Marinobacter algicola DG893				
371		146303851.ref	YP_001191167.1	putative peroxiredoxin	Metaliosphaera sedulia DSM 5348				FSHPGDFTPVCTITELSVDSHIEWWILGMLTATVR
	0	145702101.gb	ABP95243.1	1-Cys peroxiredoxin	Metaliosphaera sedulia DSM 5348				
372		28916703.ref	NP_796230.1	peroxiredoxin 5 related sequence 1 protein	Mus musculus				FSHPKDFTPVCTITELSVDDHLAWSKDVKEKDPKLTAR
	0	26325554.gb	BAC26531.1	unnamed protein product	Mus musculus				
	0	26345828.gb	BAC36564.1	unnamed protein product	Mus musculus				
	0	56789921.gb	AAH87895.1	Peroxiredoxin 6, related sequence 1	Mus musculus				
	0	74149439.gb	BAE36371.1	unnamed protein product	Mus musculus				
	0	148695512.gb	EDI27259.1	mCG48959	Treponema denticola				LGDDFHPADFPTVCTTEFLSIDSLSHLKWIEWINTVTR
373	9.87E-20	62287728.sp	Q73R84	TDXH_TREDE Probable peroxiredoxin	Bradyrhizobium sp. ORS278				FSHPADFPTICTTELLSCNSHKEWLEDIPLPARQKGE
374		47028297.gb	AAI09081.1	peroxidase	Bradyrhizobium sp. ORS278				FSHPGDFTPVCTITELSCDSHKEWIKVDKDPHGVR
375		6466098.gb	AAF12782.1	AF191099_1 1-Cys peroxiredoxin	Fagopyrum esculentum				FSHPKDFTPVCTITELSVDKHQAQWSEDINLTVROGED
376		146340217.ref	YP_001205265.1	Thioredoxin peroxidase (AhpC, Alkyl hydroperoxide reductase)	Bradyrhizobium sp. ORS278				
	0	146193023.emb	CAL77032.1	Thioredoxin peroxidase (AhpC, Alkyl hydroperoxide reductase)	Bradyrhizobium sp. ORS278				
377		119485821.ref	XP_001262263.1	AhpC/TSA family thioredoxin peroxidase, putative	Neosartorya fischeri NRRL 181				QEOPFHPADFPTVCTITELLSADSHGDWWDKDFPTIR
	0	119410409.gb	EAW20356.1	AhpC/TSA family thioredoxin peroxidase, putative	Neosartorya fischeri NRRL 181				
378		15678187.ref	NP_275302.1	alkyl hydroperoxide reductase	Meiwothermobacter themauto BCP (2.797E-09)				FSHPADFPTVCTITEFFRELDLSVDSHIKWIEWINTVTR
	0	2621201.gb	AAH84665.1	alkyl hydroperoxide reductase	Meiwothermobacter themauto BCP (2.797E-09)				
379	9.87E-20	45360855.ref	NP_989102.1	hypothetical protein LOC394706	Xenopus tropicalis				FSHPRDYTPVCTITELSDHDLGWSKDIKDPVTVAR
	0	38566186.gb	AAH62510.1	Hypothetical protein MGC76137	Xenopus tropicalis				
	0	89272936.emb	CAJ82892.1	peroxiredoxin 6	Xenopus tropicalis				
380		118589653.ref	XP_01547058.1	antioxidant protein LsfA	Stappia aggregata IAM 12614	BCP (9.270E-09)			FSHPKDFTPVCTITELKLDKVSVDHHRWVGDTILTIVR
	0	118437739.gb	EAV44375.1	antioxidant protein LsfA	Stappia aggregata IAM 12614				
381		154501119.ref	XP_02039157.1	hypothetical protein BACCAP_04808	Bacteroides capillosus ATCC 29799				QENRFHPADFPTVCTTEFLSVDSHAWLRKITQAVR
	0	150269863.gb	EDM97397.1	hypothetical protein BACCAP_04808	Bacteroides capillosus ATCC 29799				
382	5.04E-13	119476574.ref	XP_001259200.1	antioxidant, AhpC/TSA family, putative	Neosartorya fischeri NRRL 181				IGNDFHPEDYTPVCTITELLSANSHDGVNDINVDAR
	0	119407354.gb	EAW17303.1	antioxidant, AhpC/TSA family, putative	Neosartorya fischeri NRRL 181				
383		88902538.ref	XP_01118065.1	Peroxidase	Polaribacter irgensii 23-P				FSHPADYTPVCTITELAEFDLSVDSHKEWIKDIQILTIVR
	0	88781396.gb	EAR12574.1	Peroxidase	Polaribacter irgensii 23-P				
384	3.73E-13	111071162.gb	EAT192282.1	hypothetical protein SNOG_00787	Phaeosphaeria nodorum SN15				QGFIFHPEDYTPVCTITELLSANSHGKWKIDIASTGR
385		91772959.ref	YP_565651.1	peroxiredoxin	Meiwanococcoides burtonii DSM 6242				FSHPADFPTVCTITELSIDAHIAWLRTIPVIADLRKD
	0	91711974.gb	ABE51901.1	3-Cys thioredoxin peroxidase	Meiwanococcoides burtonii DSM 6242				
386		41387146.ref	NP_957099.1	peroxiredoxin 6	Danio rerio				FSHPRDYTPVCTITELSIDHHRKRWSEDILGMLPLTVAR
	0	37748290.gb	AAH59671.1	Peroxiredoxin 6	Danio rerio				
	0	55251222.emb	CAH68943.1	novel protein (zgc:73360)	Danio rerio				
	0	157423087.gb	AAI53617.1	Prx6 protein	Danio rerio				
387		109019544.ref	XP_001101473.1	PREDICTED: peroxiredoxin 6	Macaca mulatta				FSHPRDFTPVCTITELSIDHLLAWSKIDAEKDPVTVAR
388		161485727.ref	NP_662627.2	peroxiredoxin	Chlorobium tepidum TLS				FSHPADFPTVCTITELSHHWVWLDVLDLGMILTIVR
389		166843142.gb	ABK06390.1	peroxiredoxin 6-related sequence 1	Mus caroli				FSHPKDFTPVCTITELSIDHLLAWSKIDAEKDPVTVAR
390	4.54E-15	156448993.ref	XP_02055377.1	Peroxiredoxin	Methylobacterium chloromethanum BCP (8.736E-09)				FSHPADFPTVCTITELSLAWAHNIGMLSATVTR
	0	156192509.gb	EDQ24694.1	Peroxiredoxin	Methylobacterium chloromethanum CM4				
391		67917886.ref	XP_00511489.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Chlorobium limicola DSM 245				FSHPADYTPVCTITEFMSVDSHKKWVWVWLDLGMILTIVR
	0	67784419.gb	EAM443791.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Chlorobium limicola DSM 245				
392		66087157.ref	XP_677992.1	1-cys peroxidoxin	Plasmodium berghei strain ANKA				FSHPNDFTPVCTITELFCNSHQWIEDIEKDPKLTCTR
	0	56498312.emb	CAH197886.1	1-cys peroxidoxin, putative	Plasmodium berghei				
393		159045062.ref	YP_001533856.1	Peroxiredoxin	Dinoroseobacter shibae DFL 12				QDMNFSHPADFPTVCTITELSIDAHIAWIMRSITQAVR
	0	157912822.gb	ABV94255.1	Peroxiredoxin	Dinoroseobacter shibae DFL 12				
394		921112314.ref	YP_572242.1	Peroxidase	Chromohalobacter salexigens DSM 3043				FSHPKDFTPVCTITELSVDDHKAWEVDILTIVROGGWD
	0	91795404.gb	ABE57543.1	1-Cys peroxiredoxin	Chromohalobacter salexigens DSM 3043				
395		62287772.sp	QBKBN8	TDXH_CHLITE Probable peroxiredoxin	Chlorobium tepidum TLS				FSHPADFPTVCTITEFSSHKKWVWVWLDVLDLGMILTIVR
	0	21647758.gb	AAM72969.1	peroxiredoxin, putative	Chlorobium tepidum TLS				
396		118793114.ref	XP_320690.3	thioredoxin-dependent peroxidase (AGAP011824-PA)	Anopheles gambiae str. PEST				FSHPADFPTVCTITELHSVDCHVDWVNDIDEKDAQTVR
	0	116117223.gb	EAA00332.3	thioredoxin-dependent peroxidase (AGAP011824-PA)	Anopheles gambiae str. PEST				
398		109631584.gb	ABG35966.1	glutathione peroxidase	Helianthus annuus				FSHPGDFTPVCTITELSCDSHKEWIKDIKDAKSTGR

		109631586.gb	ABG35967.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		109631588.gb	ABG35968.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		109631604.gb	ABG35976.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		109631606.gb	ABG35977.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		109631608.gb	ABG35978.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		109631610.gb	ABG35979.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		109631612.gb	ABG35980.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		109631614.gb	ABG35981.1	glutathione peroxidase				Helianthus annuus	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
399	0	91775904.ref	YP_545660.1	Peroxidase				Methylobacillus flagellatus KT	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
		91709891.ref	ABE49819.1	1-Cys peroxidoredoxin				Methylobacillus flagellatus KT	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
400	0	14286173.sp	O26262	TDXH_METTH Probable peroxidoredoxin				Methanobacterium thermoautotrophicum BCP (1.928E-09) BCP eng (0.37)	FSHPADFTPVCITTEFLSVDSHKGWITDIQGAETATVR
401	0	78061033.ref	YP_370941.1	Peroxidase				Burkholderia sp. 383	LGEDFSHPKDFTPVCTTEFLSVDHKKWADIELTVA
		77968918.gb	ABB10297.1	Peroxidase				Burkholderia sp. 383	LGEDFSHPKDFTPVCTTEFLSVDHKKWADIELTVA
402	6.03E-15	120402431.ref	YP_952260.1	peroxidoredoxin				Mycobacterium vanbaalenii PYR-1	NEMPFSPADFTPVCITTEFLSVDHKKWADIELTVA
		119955249.gb	ABM12254.1	3-Cys thioredoxin peroxidase				Mycobacterium vanbaalenii PYR-1	NEMPFSPADFTPVCITTEFLSVDHKKWADIELTVA
403	1.12E-09	11079190.gb	BAB17604.1	peroxidoredoxin				Haemaphysalis longicornis	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
404	0	88799325.ref	ZP_01114903.1	thiol-specific antioxidant protein				Reinekea sp. MED297	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
		88777864.gb	EAR09061.1	thiol-specific antioxidant protein				Reinekea sp. MED297	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
405	1.23E-13	12065322.ref	YP_957673.1	Peroxidase				Marinobacter aquaeolei VT8	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
		120323171.gb	ABM17486.1	1-Cys peroxidoredoxin				Marinobacter aquaeolei VT8	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
406	0	60300018.gb	AAK18637.1	peroxidoredoxin				Glycolalpa orientalis	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
407	0	89891742.ref	ZP_01203245.1	peroxidoredoxin, AhpC/Tsa family				Flavobacteria bacterium BBFL7	SDFAKDKWIFSHPADFTPVCITTEFLSVDHKKWADIELTVA
		89516077.gb	EAS18741.1	peroxidoredoxin, AhpC/Tsa family				Flavobacteria bacterium BBFL7	SDFAKDKWIFSHPADFTPVCITTEFLSVDHKKWADIELTVA
408	2.91E-14	160378621.ref	YP_001557589.1	Peroxidoredoxin				Clostridium phytofermentans ISDg	FSHPGDFTPVCTSEFLSVDHKKWADIELTVA
		160427287.gb	ABX40850.1	Peroxidoredoxin				Clostridium phytofermentans ISDg	FSHPGDFTPVCTSEFLSVDHKKWADIELTVA
409	0	92117693.ref	YP_577422.1	Peroxidase				Nitrobacter hamburgensis X14	LSIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
		91800587.gb	ABE62962.1	Peroxidase				Nitrobacter hamburgensis X14	LSIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
410	0	28872429.ref	NP_795048.1	antioxidant, AhpC/Tsa family				Pseudomonas syringae pv. tomato s/r. DC3000	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
		28856584.gb	AAO58743.1	antioxidant, AhpC/Tsa family				Pseudomonas syringae pv. tomato s/r. DC3000	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
411	1.07E-15	164861047.ref	XP_001731646.1	hypothetical protein MGL_0914				Malassezia globosa CBS 7966	FSHPGDFTPVCTSEFLSVDHKKWADIELTVA
		159105547.ref	EDP44432.1	hypothetical protein MGL_0914				Malassezia globosa CBS 7966	FSHPGDFTPVCTSEFLSVDHKKWADIELTVA
412	0	115473617.ref	NP_001060407.1	Os07g0638300				Onyza sativa (japonica cultivar-group)	GLTIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
		188517777.sp	POC5C9	REHYA_ORYSU_1-Cys peroxidoredoxin A (1-Cys Prx A) (TH putative RAB24 protein				Onyza sativa (japonica cultivar-group)	GLTIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
		27261084.gb	BAC45197.1	putative RAB24 protein				Onyza sativa (japonica cultivar-group)	GLTIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
		33241060.gb	AAQ01200.1	peroxidoredoxin				Onyza sativa (japonica cultivar-group)	GLTIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
		113611943.gb	BAF22321.1	Os07g0638300				Onyza sativa (japonica cultivar-group)	GLTIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
413	0	50555488.ref	XP_505152.1	hypothetical protein				Onyza sativa (japonica cultivar-group)	GLTIGFSPKDFTPVCTTEFLSVDHKKWADIELTVA
		49651022.emb	CAG77959.1	unnamed protein product				Yarrowia lipolytica	PAGARFSPADFTPVCITTEFLSVDHKKWADIELTVA
414	0	22299804.ref	NP_663051.1	AhpC/TSA family protein				Thermosynechococcus elongatus BP-1	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
		22295988.gb	BAC09813.1	AhpC/TSA family protein				Thermosynechococcus elongatus BP-1	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
415	0	13541930.ref	NP_111618.1	putative peroxidoredoxin				Thermoplasma volcanium GSS1	FSHPGDFTPVCTTEFLSVDHKKWADIELTVA
		23822556.sp	Q879N7	TDXH_THEVO Probable peroxidoredoxin				Thermoplasma volcanium GSS1	FSHPGDFTPVCTTEFLSVDHKKWADIELTVA
		14325361.gb	BAB60265.1	hydroperoxide reductase				Thermoplasma volcanium GSS1	FSHPGDFTPVCTTEFLSVDHKKWADIELTVA
416	1.95E-17	157313403.gb	ABV32570.1	1-Cys peroxidoredoxin				Bombyx mori	LKGTFSHPSPDFTPVCTTEFLSVDHKKWADIELTVA
417	2.68E-20	124512718.ref	XP_001349492.1	1-cys peroxidoredoxin				Plasmodium falciparum 3D7	FSHPHDFTPVCITTEFLSVDHKKWADIELTVA
		4996210.gb	BAA78369.1	1-cys peroxidoredoxin				Plasmodium falciparum	FSHPHDFTPVCITTEFLSVDHKKWADIELTVA
		23499261.emb	CAD51341.1	1-cys peroxidoredoxin				Plasmodium falciparum 3D7	FSHPHDFTPVCITTEFLSVDHKKWADIELTVA
418	0	159041353.ref	YP_001540605.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/				Caldwellia marilingensis IC-167	FSHPGDFTPVCTTEFLSVDHKKWADIELTVA
		157920188.gb	ABW01615.1	alkyl hydroperoxide reductase/Thiol specific antioxidant/				Caldwellia marilingensis IC-167	FSHPGDFTPVCTTEFLSVDHKKWADIELTVA
419	0	91217129.ref	ZP_01254099.1	antioxidant, AhpC				Psychroflexus torquis ATCC 700755	SEFAPEKWFISHPADFTPVCITTEFLSVDHKKWADIELTVA
		91184729.gb	EAS71110.1	antioxidant, AhpC				Psychroflexus torquis ATCC 700755	SEFAPEKWFISHPADFTPVCITTEFLSVDHKKWADIELTVA
420	0	91976909.ref	YP_569568.1	Peroxidase				Rhodospseudomonas palustris BisB5	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
		91683369.gb	ABE39687.1	1-Cys peroxidoredoxin				Rhodospseudomonas palustris BisB5	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
421	0	3334373.sp	Q55060	TDXH1_SULME Probable peroxidoredoxin 1				Sulfolobus metallicus	FEKGFHPADFTPVCITTEFLSVDHKKWADIELTVA
		1045502.gb	AA02185.1	alkyl hydroperoxide reductase/thiol-specific antioxidant h				Sulfolobus metallicus	FEKGFHPADFTPVCITTEFLSVDHKKWADIELTVA
422	2.00E-11	85373707.ref	YP_457769.1	Peroxidase				Erythrobacter litoralis HTCC2594	QGTIFSHPKAFTPVCTTEFLSVDHKKWADIELTVA
		84786790.gb	ABC62972.1	Peroxidase				Erythrobacter litoralis HTCC2594	QGTIFSHPKAFTPVCTTEFLSVDHKKWADIELTVA
423	1.18E-15	15011539.gb	AAK77610.1	AF397213_1 peroxidoxin 2				Toxoplasma gondii	MSHPHDFTPVCITTEFLSVDHKKWADIELTVA
424	0	11497886.ref	NP_069108.1	alkyl hydroperoxide reductase				Archaeoglobus fulgidus DSM 4304	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
		2850373.gb	AAB90968.1	alkyl hydroperoxide reductase				Archaeoglobus fulgidus DSM 4304	FSHPADFTPVCITTEFLSVDHKKWADIELTVA
425	3.38E-15	15888804.ref	NP_354488.1	hypothetical protein Atu1480				Agrobacterium tumefaciens s/r. C58	FSHPKFNFTPVCITTEFLSVDHKKWADIELTVA
		15156560.gb	AAK87270.1	conserved hypothetical protein				Agrobacterium tumefaciens s/r. C58	FSHPKFNFTPVCITTEFLSVDHKKWADIELTVA
426	0	188594629.gb	EDP33213.1	thioredoxin peroxidase, identical				Brugia malayi	IGKDFSHPRDFTPVCTTEFLSVDHKKWADIELTVA
427	0	67922357.ref	ZP_00515869.1	Peroxidase				Crocospaera watsonii WH 8501	QLGDFSHPADYTPVCTTEFLSVDHKKWADIELTVA

428	2.09E-14	67855808.gb	EAM510655.1	Peroxidase	Crocospaera watsonii WH 8501	QERAFSHPPDDFTPICTTELEFARLSANSHHAWIKDI
		145257366.ref	XP_001401704.1	hypothetical protein An04g03360	Aspergillus niger	
		134058618.famb	CAK38602.1	unnamed protein product	Aspergillus niger	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
429	0	86751659.ref	YP_488195.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Rhodospseudomonas palustris HaA2	
		86574727.gb	ABD09284.1	1-Cys peroxiredoxin	Rhodospseudomonas palustris HaA2	FSHPGDFTPVCTTEFRYKDLSDSHIAWIRDIGATVR
430	0	14285790.sp	Q8HJL3	TDXH2_THEAC Probable peroxiredoxin 2	Thermoplasma acidophilum	FSHPGDFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
		10640269.famb	CAC12083.1	peroxiredoxin related protein	Thermoplasma acidophilum	
431	1.78E-13	47227982.famb	CAF97611.1	unnamed protein product	Tetraodon nigroviridis	FSHPKDFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
432	7.60E-14	16264837.ref	NP_437629.1	putative anti-oxidant protein, AhpC/TSA family	Sinorhizobium meliloti 1021	
		5690191.gb	AAD46984.1	unknown	Sinorhizobium meliloti	
		15140976.famb	CAC49489.1	putative anti-oxidant protein, AhpC/TSA family	Sinorhizobium meliloti 1021	THGERFSDPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
433	0	148556644.ref	YP_001264226.1	Peroxiredoxin	Spingomonas wittichii RW1	
		148501834.gb	ABQ70088.1	1-Cys peroxiredoxin	Spingomonas wittichii RW1	FSHPKDFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
434	0	126736203.ref	ZP_01751946.1	antioxidant, AhpC/Tsa family, putative	Roseobacter sp. CCS2	
		126714369.gb	EBAA11237.1	antioxidant, AhpC/Tsa family, putative	Roseobacter sp. CCS2	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
435	0	75907581.ref	YP_321877.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Anabaena variabilis ATCC 29413	
		75701306.gb	ABA20982.1	1-Cys peroxiredoxin	Anabaena variabilis ATCC 29413	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
436	0	119509525.ref	ZP_01628673.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Nodularia spumigena COY94.14	
		119465931.gb	EAW46820.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant	Nodularia spumigena COY94.14	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
437	1.49E-13	154275508.ref	XP_001538605.1	thiol-specific antioxidant	Alelomyces capsulatus NAM1	
		150415045.gb	EDN10407.1	thiol-specific antioxidant	Alelomyces capsulatus NAM1	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
438	0	126845307.ref	ZP_01717851.1	Peroxidase	Algoriphagus sp. PR1	
		126578189.gb	EAZ82882.1	Peroxidase	Algoriphagus sp. PR1	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
439	0	504791761.ref	XP_458412.1	hypothetical protein DEHA0C17908g	Debaryomyces hansenii CBS767	
		49654078.famb	CAG86494.1	unnamed protein product	Debaryomyces hansenii CBS767	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
440	0	86607449.ref	YP_476212.1	antioxidant, AhpC/Tsa family	Synechrococcus sp. JA-3-3Ab	
		86555991.gb	ABD00949.1	antioxidant, AhpC/Tsa family	Synechrococcus sp. JA-3-3Ab	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
441	0	84515052.ref	ZP_01002415.1	thiol-specific antioxidant protein	Loktanelia vestfoldensis SKA63	
		84511211.gb	EAG07665.1	thiol-specific antioxidant protein	Loktanelia vestfoldensis SKA63	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
442	0	149280238.ref	ZP_01886361.1	peroxiredoxin	Pedobacter sp. BAL39	
		149229075.gb	EDM34471.1	peroxiredoxin	Pedobacter sp. BAL39	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
443	0	109631664.gb	ABG36006.1	glutathione peroxidase	Helianthus annuus	
		109631666.gb	ABG36007.1	glutathione peroxidase	Helianthus annuus	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
444	0	75675086.ref	YP_317507.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Nitrobacter winogradskyi Nb-255	
		744199568.gb	ABA04155.1	1-Cys peroxiredoxin	Nitrobacter winogradskyi Nb-255	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
445	0	86129578.ref	NP_001034418.1	peroxiredoxin 6	Gallus gallus	
		82233783.sp	Q5ZJF4	PRDX6_CHICK Peroxiredoxin-6	Gallus gallus	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
		53133620.famb	CAG32139.1	hypothetical protein	Gallus gallus	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
446	0	14601964.ref	NP_148509.1	thioredoxin peroxidase	Aeropyrum pernix K1	
		14285795.sp	Q8Y9L0	TDXH_AERPE Probable peroxiredoxin	Aeropyrum pernix K1	QKWFSDPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
		5105979.famb	BAAB1290.1	thioredoxin peroxidase	Aeropyrum pernix K1	
447	0	88713849.ref	ZP_01107930.1	Peroxidase	Flavobacteriales bacterium HTCC2170	
		88707978.gb	EAR00215.1	Peroxidase	Flavobacteriales bacterium HTCC2170	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
448	0	160705347.gb	EAT189516.2	hypothetical protein SNOG_02785	Phaeosphaeria nodorum SN15	
450	0	91214869.ref	ZP_01251842.1	Peroxidase	Psychroflexus torquis ATCC 700755	
		91187296.gb	EAS73666.1	Peroxidase	Psychroflexus torquis ATCC 700755	YSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
451	0	118037156.ref	ZP_01508562.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phytofirmans PsJN	
		117991963.gb	EAV06257.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Burkholderia phytofirmans PsJN	LGEDFSHPKDFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
452	0	37521724.ref	NP_925101.1	AhpC/TSA family protein	Gloeobacter violaceus PCC 7421	
		35212722.famb	BAC90096.1	AhpC/TSA family protein	Gloeobacter violaceus PCC 7421	FSHPKDFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
453	0	116696175.ref	YP_841751.1	Peroxiredoxin	Ralstonia eutropha H16	
		113530674.famb	CAJ97021.1	Peroxiredoxin	Ralstonia eutropha H16	QAPDFSDPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
454	2.54E-14	36958861.gb	AAQ87029.1	Alkyl hydroperoxide reductase C22 protein	Rhizobium sp. NGR234	
455	0	156689317.ref	NP_247721.1	peroxiredoxin	Methanocaldococcus jamareschii DSM 2661	
		1591451.gb	AAE98731.1	alkyl hydroperoxide reductase	Methanocaldococcus jamareschii DSM 2661	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
456	2.23E-15	70994244.ref	XP_751969.1	mitochondrial peroxiredoxin Prx1, putative	Aspergillus fumigatus Af293	
		66849603.gb	EAL89931.1	mitochondrial peroxiredoxin Prx1, putative	Aspergillus fumigatus Af293	QERAFSDPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
457	0	156548262.ref	XP_001600739.1	PREDICTED: similar to CG3083-PA	Nasonia vitripennis	
458	0	27807167.ref	NP_777068.1	anti-oxidant protein 2 (non-selenium glutathione peroxidase)	Bos taurus	
		5902790.sp	O77834	PRDX6_BOVIN Peroxiredoxin-6 (Antioxidant protein 2)	Bos taurus	FSHPADFTPVCTTEFLSIDSHIAWMLNIEGKLPATAA
		3639081.gb	AAC84043.1	non-selenium glutathione phospholipid hydroperoxide peroxidase	Bos taurus	
		3703050.gb	AAC63016.1	ciliary body glutathione peroxidase	Bos taurus	
		6687043.famb	CAB64802.1	non-selenium glutathione phospholipid hydroperoxide peroxidase	Bos taurus	
		59858299.gb	AAOX0894.1	peroxiredoxin 6	Bos taurus	

459	0	73587255.gb	AAI02173.1	Anti-oxidant protein 2 (non-selenium glutathione peroxidase)	Bos taurus						FSHPKDFTPVCTTEFEVSDHDKKWKGDISATVRQLKL
		86139391.ref	ZP_01057960.1	thiol-specific antioxidant protein	Roseobacter sp. MED193						
460	0	85823894.gb	EAC044100.1	thiol-specific antioxidant protein	Roseobacter sp. MED193						FSHPADYTPVCTTELLSVDSHKGWIGDITLTVRQLTD
		81301258.ref	YP_401466.1	Peroxidase	Synechococcus elongatus PCC 7942						
461	0	81170139.gb	ABB58479.1	1-Cys peroxiredoxin	Synechococcus elongatus PCC 7942						FSHPADYTPVCTTELLSVDAHRWEVDITVTRQLTD
		148556066.ref	YP_001263648.1	Peroxidase	Sphingomonas wittichii RW1						
		148501256.gb	ABO69510.1	1-Cys peroxiredoxin	Sphingomonas wittichii RW1						FSHPADYTPVCTTELLSVDAHRWEVDITVTRQLTD
462	5.37E-12	115652356.ref	XP_001183978.1	PREDICTED: similar to glutathione peroxidase, partial	Strongylocentrotus purpuratus						FSHPADYTPVCTTELLTPEEKRGKLIASGDGRGWI
		115933957.ref	YP_001191688.1	PREDICTED: similar to glutathione peroxidase, partial	Strongylocentrotus purpuratus						
463	0	124265314.ref	XP_001019318.1	Peroxidase	Methylobium petroleiphilium PM1						QGFLFSHPADFTPVCTTELLSVDSVKHGAWIEDITATVR
		124258089.gb	ABM93083.1	1-Cys peroxiredoxin	Methylobium petroleiphilium PM1						
464	7.87E-14	84701925.gb	ZP_01016550.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Parvularcula bermudensis HTCC2503						GMMPFAHPADFTPVCTSEFLSIDAHLAWVERITTVVR
		84691221.gb	EAG17061.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	Parvularcula bermudensis HTCC2503						FSHPADYTPVCTTELLSVDSHKGWIDDITLTVRQLTD
465	0	53720358.ref	YP_109344.1	putative oxidoreductase	Burkholderia mallei ATCC 23344						
		53725605.ref	YP_103646.1	antioxidant, AhpC/Tsa family	Burkholderia mallei ATCC 23344						
		67643912.ref	ZP_00442655.1	COG0450: Peroxiredoxin	Burkholderia mallei GB8 horse 4						
		76811032.ref	YP_334611.1	antioxidant protein Lsfa	Burkholderia pseudomallei 1710b						
		83621648.ref	ZP_00932056.1	COG0450: Peroxiredoxin	Burkholderia mallei FMH						
		83626503.ref	ZP_00936727.1	COG0450: Peroxiredoxin	Burkholderia mallei JHU						
		99913801.ref	ZP_01320398.1	hypothetical protein Bpse1_03000089	Burkholderia pseudomallei 1655						
		100064597.ref	ZP_01325988.1	hypothetical protein BpseP_03000073	Burkholderia pseudomallei Pasteur						
		100124025.ref	ZP_01329603.1	hypothetical protein BpseS_03002355	Burkholderia pseudomallei S13						
		100236792.ref	ZP_01337357.1	hypothetical protein Bpse4_03000143	Burkholderia pseudomallei 406e						
		100263158.ref	ZP_01338019.1	hypothetical protein Bmal2_03004253	Burkholderia mallei 2002721280						
		100917761.ref	ZP_01346238.1	hypothetical protein Bmal10_030000941	Burkholderia mallei 10399						
		121601598.ref	YP_992184.1	antioxidant, AhpC/Tsa family	Burkholderia mallei SAVP1						
		124384211.ref	YP_001028629.1	antioxidant, AhpC/Tsa family	Burkholderia mallei NCTC 10229						
		126448959.ref	YP_001060198.1	antioxidant protein Lsfa	Burkholderia pseudomallei 668						
		126448959.ref	YP_001081469.1	antioxidant, AhpC/Tsa family	Burkholderia mallei NCTC 10247						
		126452406.ref	YP_001067462.1	antioxidant protein Lsfa	Burkholderia pseudomallei 1109a						
		134280460.ref	ZP_01767171.1	antioxidant protein Lsfa	Burkholderia pseudomallei 305						
		161356914.ref	ZP_02102791.1	antioxidant protein Lsfa	Burkholderia pseudomallei 1108b						
		161371239.ref	ZP_02110804.1	antioxidant protein Lsfa	Burkholderia pseudomallei 1710a						
		52210772.bamb	CAH36756.1	putative oxidoreductase	Burkholderia pseudomallei K96243						
		52429028.gb	AAU49621.1	antioxidant, AhpC/Tsa family	Burkholderia mallei ATCC 23344						
		76580465.gb	ABA49960.1	antioxidant protein Lsfa	Burkholderia pseudomallei 1710b						
		121230408.gb	ABM52926.1	antioxidant, AhpC/Tsa family	Burkholderia mallei SAVP1						
		124292231.gb	ABN01500.1	antioxidant, AhpC/Tsa family	Burkholderia mallei NCTC 10229						
		126219460.gb	ABN82966.1	antioxidant protein Lsfa	Burkholderia pseudomallei 668						
		126226049.gb	ABN89588.1	antioxidant protein Lsfa	Burkholderia pseudomallei 1109a						
		126241829.gb	ABO04922.1	antioxidant, AhpC/Tsa family	Burkholderia mallei NCTC 10247						
		134248467.gb	EBA48550.1	antioxidant protein Lsfa	Burkholderia pseudomallei 305						
		1477446587.gb	EDK53664.1	antioxidant, AhpC/Tsa family	Burkholderia mallei FMH						
		1477515668.gb	EDK58635.1	antioxidant, AhpC/Tsa family	Burkholderia mallei JHU						
		148025420.gb	EDK83574.1	antioxidant, AhpC/Tsa family	Burkholderia mallei 2002721280						
		157808837.gb	EDO86007.1	antioxidant protein Lsfa	Burkholderia pseudomallei 406e						
		157939350.gb	EDO98520.1	antioxidant protein Lsfa	Burkholderia pseudomallei 406e						
		160696705.gb	EDP86675.1	antioxidant, AhpC/Tsa family	Burkholderia mallei ATCC 10399						
466	0	16088765.gb	BAG03473.1	peroxiredoxin	Microcystis aeruginosa NIES-843						QLGDFSHPADYTPVCTTELLSVDSHRGWINDIINTVTR
467	0	73749356.ref	YP_308595.1	antioxidant, AhpC	Dehalococcoides sp. CBDB1						FSHPADFTPVCTTEFLSVDSHIAWVRVTVTRQENMA
		73661072.bamb	CAI83679.1	antioxidant, AhpC	Dehalococcoides sp. CBDB1						
468	0	67527031.ref	XP_661577.1	hypothetical protein AN3973.2	Aspergillus nidulans FGSC A4						PLARQGGKIFSHPADFTPVCTTELLSANSHGDKWKDI
		40740254.gb	EAA59444.1	hypothetical protein AN3973.2	Aspergillus nidulans FGSC A4						
469	0	145220000.ref	YP_001130709.1	peroxiredoxin	Aspergillus nidulans F-GSC 265						FSHPADFTPVCTTEFEFFDSHKKWVQWILLDVSNTVTR
		145206164.gb	ABP37207.1	1-Cys peroxiredoxin / 3-Cys thioredoxin peroxidase	Prosthecochloris vibriiformis DSM 265						
470	0	126730408.ref	ZP_01746219.1	thiol-specific antioxidant protein	Prosthecochloris vibriiformis DSM 265						FSHPKDFTPVCTTEFLQADEHKWKGDISATVRLSID
		126709141.gb	EBA08196.1	thiol-specific antioxidant protein	Sagittula stellata E-37						
471	0	83721537.ref	YP_441934.1	antioxidant, AhpC/Tsa family	Sagittula stellata E-37						FSHPADYTPVCTTELLSVDSHKGWIDDITLTVRQLTD
		83655362.gb	ABC39425.1	antioxidant, AhpC/Tsa family	Burkholderia thailandensis E264						
472	0	154311606.ref	XP_001555132.1	hypothetical protein BC1G_06262	Burkholderia thailandensis E264						
		150850773.gb	EDN25966.1	hypothetical protein BC1G_06262	Botryotinia fuckeliana B05.10						
473	8.60E-15	45185491.ref	NP_983207.1	ACL197Wp	Botryotinia fuckeliana B05.10						FSHPADFTPVCTTEITHVWKWIKDILLDGPVPLRQEKY
		44981209.gb	AAS51031.1	ACL197Wp	Ashyba gossypii ATCC 10895						
474	0	110678013.ref	YP_681020.1	antioxidant, AhpC/Tsa family, putative	Ashyba gossypii ATCC 10895						FSHPKDFTPVCTTEFEVSDHDKKWKGDISATVRLKL
				antioxidant, AhpC/Tsa family, putative	Roseobacter denitrificans OCh 114						

475	6.19E-20	109454129 gb	ABG30334.1	antioxidant, AhpC/Tsa family, putative	Roseobacter denitrificans OCh 114	SSHPRDFTPVCTTELLSIDDHLAWSKDAEKDPEISR
476	0	119908585 ref	XP_001252846.1	PREDICTED: similar to non-selenium glutathione prospi	Bos taurus	FSHPGDFTPVCTTELEHFKWKKDPIFTRFVIDVEKD
477	0	164648130 gb	EDR1237.3	cysteine peroxidase	Laccaria bicolor S238N-H82	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
478	0	88806117 ref	ZP_01121635.1	putative antioxidant protein	Robignitalea biformata HTCC2501	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
479	0	88783728 gb	EAR14897.1	putative antioxidant protein	Robignitalea biformata HTCC2501	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
480	0	114569049 ref	YP_755729.1	Peroxidase	Maricaulis maris MCS10	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
481	0	114339511 gb	ABI64791.1	1-Cys peroxidase	Maricaulis maris MCS10	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
482	0	146452568 gb	EDK46824.1	mitochondrial peroxidase PRX1	Loederomyces elongisporus NRRL YB-4239	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
483	0	109631696 gb	ABG36022.1	glutathione peroxidase	Loederomyces elongisporus NRRL YB-4239	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
484	0	134294860 ref	YP_001118595.1	Peroxidase	Burkholderia vietnamiensis G4	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
485	0	134138017 gb	ABO53760.1	Peroxidase	Burkholderia vietnamiensis G4	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
486	0	83989024 ref	ZP_00952545.1	alkyl hydroperoxide reductase	Oceanicaulis alexandrii HTCC2833	NEKATHGERFHPADFTPVCTTEFLSIDAHIAHWVRNI
487	0	83852471 gb	EAP90324.1	alkyl hydroperoxide reductase	Oceanicaulis alexandrii HTCC2833	NEKATHGERFHPADFTPVCTTEFLSIDAHIAHWVRNI
488	0	125808647 ref	XP_001360817.1	GA11614-PA	Drosophila pseudoobscura	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
489	0	54635989 gb	EAL25392.1	GA11614-PA	Drosophila pseudoobscura	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
490	0	16329971 ref	NP_440699.1	rehydrin	Synechocystis sp. PCC 6803	QLGDFSHPADYTPVCTTELEEFDLSDVSHHFWIKDIDETER
491	0	1652457 dbj	BAA17379.1	rehydrin	Synechocystis sp. PCC 6803	QLGDFSHPADYTPVCTTELEEFDLSDVSHHFWIKDIDETER
492	0	150024999 ref	YP_001295825.1	Probable peroxidase	Flavobacterium psychrophilum JIP0286	TGMFLSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
493	0	149771540 emb	CAL43009.1	Probable peroxidase	Flavobacterium psychrophilum JIP0286	TGMFLSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
494	0	126178114 ref	YP_001046079.1	Peroxidase	Flavobacterium psychrophilum JIP0286	TGMFLSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
495	0	125860908 gb	ABN56097.1	3-Cys thioredoxin peroxidase	Methanococcus marisnigri JR1	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
496	0	88819111 ref	ZP_01127164.1	Peroxidase	Methanococcus marisnigri JR1	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
497	0	88790795 gb	EAR21909.1	Peroxidase	Methanococcus marisnigri JR1	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
498	0	115397657 ref	XP_001214520.1	mitochondrial peroxidase PRX1	Nitrococcus mobilis Nb-231	YSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
499	0	114192711 gb	EAU34411.1	mitochondrial peroxidase PRX1	Nitrococcus mobilis Nb-231	YSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
500	0	157314444 gb	ABV33543.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Aspergillus terreus NIH2624	QERAFSHPDFTPICITTELEFTARLSANSHHAWIKDI
501	0	89210317 ref	ZP_01188707.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Aspergillus terreus NIH2624	QERAFSHPDFTPICITTELEFTARLSANSHHAWIKDI
502	0	89159966 gb	EAR79624.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	Thermotoga litoralis OCH 149	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
503	0	73538809 ref	YP_299176.1	Peroxidase	Thermotoga litoralis OCH 149	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
504	0	72122148 gb	AAZ64332.1	Peroxidase	Thermotoga litoralis OCH 149	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
505	0	163703213 ref	ZP_02122046.1	Peroxidase	Ralstonia eutropha JMP134	QGTIFSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
506	0	162430536 gb	EDQ41147.1	Peroxidase	Ralstonia eutropha JMP134	QGTIFSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
507	0	114319990 ref	YP_741673.1	1-Cys peroxidase	Methylobacterium nodulans ORS 2060	FSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
508	0	114226384 gb	ABI56183.1	1-Cys peroxidase	Methylobacterium nodulans ORS 2060	FSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
509	0	125984782 ref	XP_001356155.1	GA15914-PA	Alkallimnicola ehrlichi MLHE-1	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
510	0	5464474 gb	EAL33215.1	GA15914-PA	Alkallimnicola ehrlichi MLHE-1	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
511	0	163734278 ref	ZP_02141718.1	antioxidant, AhpC/Tsa family, putative	Drosophila pseudoobscura	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
512	0	161392286 gb	EDQ16675.1	antioxidant, AhpC/Tsa family, putative	Roseobacter litoralis OCH 149	FSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
513	0	109631700 gb	ABG36024.1	glutathione peroxidase	Roseobacter litoralis OCH 149	FSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
514	0	109631702 gb	ABG36025.1	glutathione peroxidase	Roseobacter litoralis OCH 149	FSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
515	0	73961355 ref	XP_537190.2	PREDICTED: similar to Peroxiredoxin 6 (Antioxidant pro	Helianthus annuus	FSHPGDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
516	0	71733726 ref	YP_276996.1	antioxidant, AhpC/Tsa family	Helianthus annuus	FSHPGDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
517	0	71554279 gb	AAZ33490.1	antioxidant, AhpC/Tsa family	Canis familiaris	FSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
518	0	160877634 pdb	2E2G	A Chain A, Crystall Structure Of Archaeal Peroxiredoxin,	Pseudomonas syringae pv. phaseolicola 1448A	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
519	0	160877635 pdb	2E2G	B Chain B, Crystall Structure Of Archaeal Peroxiredoxin,	Pseudomonas syringae pv. phaseolicola 1448A	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
520	0	160877636 pdb	2E2G	C Chain C, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K1	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
521	0	160877637 pdb	2E2G	D Chain D, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K2	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
522	0	160877638 pdb	2E2G	E Chain E, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K3	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
523	0	160877639 pdb	2E2G	F Chain F, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K4	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
524	0	160877640 pdb	2E2G	G Chain G, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K5	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
525	0	160877641 pdb	2E2G	H Chain H, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K6	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
526	0	160877642 pdb	2E2G	I Chain I, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K7	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
527	0	160877643 pdb	2E2G	J Chain J, Crystall Structure Of Archaeal Peroxiredoxin,	Aeropyrum Permix K8	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
528	0	118700339 ref	ZP_01558408.1	Peroxidase	Aeropyrum Permix K9	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
529	0	118642002 gb	EAV48845.1	Peroxidase	Aeropyrum Permix K10	QKWFHSPADFTPVCTTEFLSVDSHHKWIKDIDETER
530	0	21226916 ref	NP_632838.1	peroxidase	Burkholderia ambifaria MC40-6	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
531	0	23822244 sp	Q8PYF6	TDXH_ME1MA Probable peroxidase	Burkholderia ambifaria MC40-6	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
532	0	20905224 gb	AAM30510.1	putative peroxidase	Meihausarcina mazel Go1	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
533	0	163794920 ref	ZP_02188889.1	peroxidase	Meihausarcina mazel Go1	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
534	0	159179739 gb	EDP64266.1	Peroxiredoxin	Methanosarcina mazel Go1	QLGDFSHPKDFTPVCTTELEEFDLSDVSHHFWIKDIDETER
535	0	24652434 ref	NP_724931.1	Peroxiredoxin 2540 CG12405-PA, isoform A	alpha proteobacterium BAL199	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER
536	0	73037478 gb	AAF58797.1	CG12405-PA	Drosophila melanogaster	FSHPADFTPVCTTELEEFDLSDVSHHFWIKDIDETER

505	0	88813380	ref	ZP_01128617.1	Peroxidase	Nitrococcus mobilis Nb-231	FSHPKDFTPVCTTELLSVDDHREWLKDFIPATYGGGED
		88789348	gpb	EAR20476.1	Peroxidase	Nitrococcus mobilis Nb-231	
506	0	149201029	ref	ZP_01878004.1	Peroxidase	Roseovarius sp. TMT035	FSHPKDFTPVCTTEFVSVDDHRKWKGDISA TVRQLKL
		149145362	gpb	EDM333888.1	Peroxidase	Roseovarius sp. TMT035	
507	0	115525976	ref	YP_782887.1	Peroxidase	Rhodospseudomonas pallustris BisA53	VL TASF SHPADFTPVCTTEFLSDSHLAWVGNIGLQ
		115519923	gpb	ABJ07907.1	1-Cys peroxiredoxin	Rhodospseudomonas pallustris BisA53	



Hit#	p-value	gi number	db	protein accession	Name	Species	Active Site Signature
1	3.44E-17	89256354	ref	YP_513716.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. holarctica	FSLPGAFPTCSTYQLPRFKELGIDEVLSVNGNGEFGKRSWRY
		115314799	ref	YP_763522.1	peroxidorexin	<i>Francisella tularensis</i> subsp. holarctica	
		156502437	ref	YP_001428502.1	hybrid peroxidorexin hyPrx5	<i>Francisella tularensis</i> subsp. holarctica	
		891441185	emb	CAJ79454.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. holarctica	
		115129698	gb	AB182885.1	peroxidorexin	<i>Francisella tularensis</i> subsp. holarctica	
		134253502	gb	EBA52596.1	ahpC/TSA family protein	<i>Francisella tularensis</i> subsp. holarctica	
		156253040	gb	ABU61546.1	AhpC/Tsa family, antioxidant protein	<i>Francisella tularensis</i> subsp. holarctica	
		157122278	gb	EDO66418.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. holarctica	
2	2.11E-16	114769628	ref	ZP_01447238.1	antioxidant, AhpC/Tsa family protein	<i>alpha proteobacterium</i> HTCC2255	GPVAFGLPGAYTNTCSTAHMPCLAVNMKSWAKDMFGRSQRY
		114549333	gb	EAU52215.1	antioxidant, AhpC/Tsa family protein	<i>alpha proteobacterium</i> HTCC2255	
3	2.14E-09	146415758	ref	XP_001483849.1	hypothetical protein PGUG_04578	<i>Pichia guilliermondii</i> ATCC 6260	TSAPGAFPTCTEQHVPILTANVAAWGKALLTGAFLRTGRY
		146392322	gb	EDK40480.1	hypothetical protein PGUG_04578	<i>Pichia guilliermondii</i> ATCC 6260	
4	0	33601987	ref	NP_889547.1	putative glutaredoxin	<i>Bordetella bronchiseptica</i> RB50	FSLPGAFPTCSSTHLPVCSVNMMEWAKDQNGNGEFGKRSWRY
		33576425	emb	CAE33503.1	putative glutaredoxin	<i>Bordetella bronchiseptica</i> RB50	
5	2.42E-17	149184285	ref	ZP_01862603.1	AhpC/TSA family protein	<i>Erythrobacter</i> sp. SD-21	FAVPGAFPTCSAKHLPATSVNVMGAWKQSAENGEMGHRSQRY
		148831605	gb	EDL50038.1	AhpC/TSA family protein	<i>Erythrobacter</i> sp. SD-21	
6	0	145352465	ref	XP_001420565.1	predicted protein	<i>Ostreococcus lucimarinus</i> CCE9901	FAVPGAFPTCSTKHLPGVDECVSNVMNAWGNWSAMGTRRRY
		144580800	gb	ABO98858.1	predicted protein	<i>Ostreococcus lucimarinus</i> CCE9901	
7	0	57099689	ref	XP_533241.1	PREDICTED: similar to Peroxidorexin 5, mitochondrial prece	<i>Canis familiaris</i>	FGVPGAFTPGCKSTHLPCLSVNVTAWGRAHGNHRLKRFGTGL
		15642632	ref	NP_232265.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> O1 biovar eltor str.	FSLPGAFPTCSSTHLPVCSVNMNAWAKDQNGNGEFGKRSWRY
		121587911	ref	ZP_01677666.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> 2740-80	
		121727592	ref	ZP_01680700.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> V52	
		147651129	ref	YP_001218130.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> O395	
		153213977	ref	ZP_01949170.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> 1587	
		153224207	ref	ZP_01954293.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> MAK 757	
		153819461	ref	ZP_01972128.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> NCTC 8457	
		153821573	ref	ZP_01974240.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> B33	
		153825079	ref	ZP_01977746.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> MZO-2	
		9657228	gb	AAF95778.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> O1 biovar eltor str.	
		121547816	gb	EAX57902.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> 2740-80	
		121630083	gb	EAX62488.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> V52	
		124115547	gb	EAY34367.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> 1587	
		124117777	gb	EAY36520.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> MAK 757	
		125619186	gb	EAZ47116.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> MO10	
		125622017	gb	EAZ50340.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> V51	
		126510002	gb	EAZ72596.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> NCTC 8457	
		126520958	gb	EAZ78181.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> B33	
		146317012	gb	ABQ21551.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> O395	
		149741225	gb	EDM55267.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> MZO-2	
		150421254	gb	EDN13537.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> RC386	
		150424014	gb	EDN15953.1	peroxidorexin family protein/glutaredoxin	<i>Vibrio cholerae</i> AM-19226	
9	3.76E-19	153833675	ref	ZP_01986342.1	redoxin domain protein	<i>Vibrio Harveyi</i> HY01	FAVPGAFPTCSEAHLPVCSVNMVAWGEAQDTGGGGVRSQRY
		148870073	gb	EDL69028.1	redoxin domain protein	<i>Vibrio Harveyi</i> HY01	
		156449923	ref	ZP_02056304.1	Redoxin domain protein	<i>Methylobacterium chloromethanicum</i>	GPDGVGVPGAFIPACHRNHLPVTSVNVNVAWQQQSLGPRSQRY
10	9.66E-11	163852015	ref	YP_001640058.1	Redoxin domain protein	<i>Methylobacterium extorquens</i> PA1	
		156191026	gb	EDQ23214.1	Redoxin domain protein	<i>Methylobacterium chloromethanicum</i>	
		163663620	gb	ABY30987.1	Redoxin domain protein	<i>Methylobacterium extorquens</i> PA1	
11	3.31E-17	56707687	ref	YP_169583.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. tularensis	FSLPGAFPTCSTYQLPRFKELGIDEVLSVNGNGEFGKRSWRY
		110670158	ref	YP_666715.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. tularensis	
		118497550	ref	YP_898600.1	peroxidorexin, AhpC-TSA family protein	<i>Francisella tularensis</i> subsp. novicida	
		134301967	ref	YP_001121936.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. tularensis	
		56604179	emb	CAG45190.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. tularensis	
		110320491	emb	CAL08573.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. tularensis	
		118423456	gb	ABK89846.1	peroxidorexin, AhpC-TSA family protein	<i>Francisella tularensis</i> subsp. novicida	
		134049744	gb	ABC46815.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. tularensis	
		151568439	gb	EDN34093.1	peroxidorexin	<i>Francisella tularensis</i> subsp. tularensis	
		151570638	gb	EDN36292.1	AhpC/TSA family protein	<i>Francisella tularensis</i> subsp. novicida	

12		151572085.gb	EDN37739.1	peroxidoredoxin	Francisella tularensis subsp. novicida	FSLPGAFTPTCSSSHLPCVSVNVMNAWKAQDGNNGEFGKRSWRY
	0	163803096.ref	ZP_02196980.1	bifunctional argininosuccinate lyase/N-acetylglutamate synthetase	Vibrio campbellii AND4	FSLPGAFTPTCSSSHLPCVSVNVMNAWKAQDGNNGEFGKRSWRY
		159173088.gb	EDP57920.1	bifunctional argininosuccinate lyase/N-acetylglutamate synthetase	Vibrio campbellii AND4	FSLPGAFTPTCSSSHLPCVSVNVMNAWKAQDGNNGEFGKRSWRY
13	3.14E-11	163770187.gb	EDQ84010.1	predicted protein	Monosiga brevicollis MX1	FGVPGAFTPGCHKTHLPGKIGCMGVNVMAGWGETVGSGRCKRF
14	2.67E-18	152981331.ref	YP_001354699.1	peroxidoredoxin	Janthinobacterium sp. Marseille	FAVPGAFTPTCSEQHAPGVDECVSNVMGAWGREQLGVRSQRY
		151281408.gb	ABR89818.1	peroxidoredoxin	Janthinobacterium sp. Marseille	FAVPGAFTPTCSEQHAPGVDECVSNVMGAWGREQLGVRSQRY
15	2.47E-16	146343358.ref	YP_001208406.1	Putative peroxidoredoxin	Bradyrhizobium sp. ORS278	MTGEFAVPGAYGTGCHKMHLPIVSNVMNAWKRDLTGIRSKRY
		146196164.emb	CAL80191.1	Putative peroxidoredoxin	Bradyrhizobium sp. ORS278	MTGEFAVPGAYGTGCHKMHLPIVSNVMNAWKRDLTGIRSKRY
16	0	90407070.ref	ZP_01215259.1	glutaredoxin	Psychromonas sp. CNPT3	FALPGAFTPTCSSSTHLPCLAVNVMNAWLDQGGSEFGKRSWRY
		90311792.gb	EAS39888.1	glutaredoxin	Psychromonas sp. CNPT3	FALPGAFTPTCSSSTHLPCLAVNVMNAWLDQGGSEFGKRSWRY
17	4.18E-12	156039413.ref	XP_001586814.1	hypothetical protein SS1G_11843	Sclerotinia sclerotiorum 1980	IGVPAAFSPSCSNHPIVAVNVTKAWGSTLPTGEGGPRSKRY
		154697580.gb	EDN97318.1	hypothetical protein SS1G_11843	Sclerotinia sclerotiorum 1980	IGVPAAFSPSCSNHPIVAVNVTKAWGSTLPTGEGGPRSKRY
18	0	88706713.ref	ZP_01103423.1	peroxidoredoxin	gamma proteobacterium KT 71	FSLPGAFTPTCSSNHLPELVEEFAKQCVSVNNGNVEFGMRSWRY
		88700226.gb	EAQ97335.1	peroxidoredoxin	Congregibacter litoralis K171	FSLPGAFTPTCSSNHLPELVEEFAKQCVSVNNGNVEFGMRSWRY
19	0	153095138.gb	EDN75685.1	peroxidoredoxin/glutaredoxin family protein	Mannheimia haemolytica PHL213	FSLPGAFTPTCSSSTHLPCLAVNVMNAWKAQDGNNGEFGKRSWRY
20	4.70E-13	145236679.ref	XP_001390987.1	hypothetical protein An05g01660	Aspergillus niger	GKGVGVPAAFSPACSSTHPVPVAVNVTKAWATSLGNNSKRY
		134076448.emb	CAK48009.1	unnamed protein product	Aspergillus niger	GKGVGVPAAFSPACSSTHPVPVAVNVTKAWATSLGNNSKRY
21	3.69E-17	145298268.ref	YP_001141109.1	peroxidoredoxin	Aeromonas salmonicida subsp.	FAVPGAFTPTCSNAHLPCVSNVMNAWQVVAQETGAGGLRAQRF
		142851040.gb	ABO89361.1	peroxidoredoxin	Aeromonas salmonicida subsp.	FAVPGAFTPTCSNAHLPCVSNVMNAWQVVAQETGAGGLRAQRF
22	6.91E-13	124022540.ref	YP_001016847.1	Peroxidoredoxin	Prochlorococcus marinus str. MIT 9303	LALPGAFTPTCSSNHLPLCLSVNNGNEGELRSWRYMAGVSSPRR
		123962826.gb	ABM77582.1	Peroxidoredoxin	Prochlorococcus marinus str. MIT 9303	LALPGAFTPTCSSNHLPLCLSVNNGNEGELRSWRYMAGVSSPRR
23	1.39E-10	126728473.ref	ZP_01744289.1	AhpC/TSA family protein	Sagittula stellata E-37	GPETFALPGAFTGTCINAHVPCIAVNFYDRSKRYCEKSCSEAM
		126711438.gb	EBA10488.1	AhpC/TSA family protein	Sagittula stellata E-37	GPETFALPGAFTGTCINAHVPCIAVNFYDRSKRYCEKSCSEAM
24	0	121634748.ref	YP_974993.1	putative redoxin	Neisseria meningitidis FAM18	FSLPGAFTPTCSSSHLPCVSVNVMNAWAAEEGNGEFGKRSWRY
		120866454.emb	CAM10200.1	putative redoxin	Neisseria meningitidis FAM18	FSLPGAFTPTCSSSHLPCVSVNVMNAWAAEEGNGEFGKRSWRY
25	7.22E-14	39937328.ref	NP_949604.1	peroxidoredoxin-like protein	Rhodopseudomonas palustris CGA009	FAVPGAFTGTCCHKMHLDPKGVIVSNVMSAWKRDLTGTRSLRY
		39851186.emb	CAE29709.1	peroxidoredoxin-like protein	Rhodopseudomonas palustris CGA009	FAVPGAFTGTCCHKMHLDPKGVIVSNVMSAWKRDLTGTRSLRY
26	0	77957410.ref	ZP_00821467.1	peroxidoredoxin	Yersinia bercovieri ATCC 43970	FSLPGAFTPTCSSSHLPCVSVNVMNAWKAQDGNNGEFGKRSWRY
		84390826.ref	ZP_00991518.1	glutaredoxin	Vibrio splendidus 12B01	FSLPGAFTPTCSSSHLPCVSVNVMNAWKAQDGNNGEFGKRSWRY
		84376629.gb	EAP93506.1	glutaredoxin	Vibrio splendidus 12B01	FSLPGAFTPTCSSSHLPCVSVNVMNAWKAQDGNNGEFGKRSWRY
28	0	166091392.gb	BAG06100.1	putative peroxidoredoxin	Microcystis aeruginosa NIES-843	FALPGAFTPTCSTSHLPCVSNVMNAWKAQDGNNGEFGKRSWRY
29	0	149139360.ref	ZP_01874393.1	putative peroxidoredoxin/glutaredoxin family protein	Leptisphaera araneosa HTCC2155	FALPGAFTPTCSSTHLPCVSNVMNAWAAQDGNNGEFGKRSWRY
		149139360.gb	EDM27762.1	putative peroxidoredoxin/glutaredoxin family protein	Leptisphaera araneosa HTCC2155	FALPGAFTPTCSSTHLPCVSNVMNAWAAQDGNNGEFGKRSWRY
30	0	50897517.gb	AA185821.1	putative peroxidoredoxin	Glossina morsitans morsitans	FGVPGAFTPGCSKTHLPCVSNVMSAWGKEHGGHRSKRFGTGL
31	8.78E-19	163746220.ref	ZP_02153578.1	peroxidoredoxin/glutaredoxin family protein	Oceanobolus indolifex HEL-45	FSLPGAFTPTCSTYQLPCLSVNVMNAWKEWQGGSEFGARSWRY
		161380105.gb	EDQ04516.1	peroxidoredoxin/glutaredoxin family protein	Oceanobolus indolifex HEL-45	FSLPGAFTPTCSTYQLPCLSVNVMNAWKEWQGGSEFGARSWRY
32	0	119510642.ref	ZP_01629771.1	membrane protein	Nodularia spumigena CCY9414	FSLPGAFTPTCSTSHLPCVSNVMVFQWKGQDGNNGEFGKRSWRY
		119464693.gb	EAW45601.1	membrane protein	Nodularia spumigena CCY9414	FSLPGAFTPTCSTSHLPCVSNVMVFQWKGQDGNNGEFGKRSWRY
33	2.08E-12	116503658.gb	EAU08553.1	hypothetical protein CC1G_07749	Coprinopsis cinerea okayama7#130	ELSTNVVPGAFTPTCHTNHLPVMSGWGRFELGIRTARYGPGV
34	1.54E-21	83032914.ref	XP_729247.1	hypothetical protein PY01475	Plasmodium yoelii str. 17XNL	DTHEISLPGAFTPLCTSKMIPCTNNVLKSWFKSMGMMPWRY
		23486502.gb	EAA20812.1	hypothetical protein	Plasmodium yoelii str. 17XNL	DTHEISLPGAFTPLCTSKMIPCTNNVLKSWFKSMGMMPWRY
35	0	163857979.ref	YP_001632277.1	putative AhpC/TSA family protein	Bordetella petrii	GTLTFAVPGAFTPTCSAKHLPCVSNVMGAWREGMGVRSQRY
		163261707.emb	CAP44009.1	putative AhpC/TSA family protein	Bordetella petrii	GTLTFAVPGAFTPTCSAKHLPCVSNVMGAWREGMGVRSQRY
36	5.13E-17	163736341.ref	ZP_02143760.1	peroxidoredoxin/glutaredoxin family protein	Phaeobacter gallaeciensis BS107	FSLPGAFTPTCSTYQLPCLAVNVMNAWAAEESQGGSEFGKRSWRY
		161390211.gb	EDQ14561.1	peroxidoredoxin/glutaredoxin family protein	Phaeobacter gallaeciensis BS107	FSLPGAFTPTCSTYQLPCLAVNVMNAWAAEESQGGSEFGKRSWRY
37	4.28E-22	121603130.ref	YP_980459.1	Redoxin domain protein	Polaromonas naphthalenivorans CJ2	FAVPGAFTPTCSAKHVPCLSVNVMGAWARDQLGLRSNRYGPGK
		120592099.gb	ABM35538.1	Redoxin domain protein	Polaromonas naphthalenivorans CJ2	FAVPGAFTPTCSAKHVPCLSVNVMGAWARDQLGLRSNRYGPGK
39	0	121998468.ref	YP_001003255.1	Glutaredoxin-family domain protein	Halorhodospira halophila SL1	FALPGAFTPTCSSTHLPCVSNVMEEVRRRDRDQDGNNGEFGKRSWRY
		121589873.gb	ABM62453.1	Glutaredoxin-family domain protein	Halorhodospira halophila SL1	FALPGAFTPTCSSTHLPCVSNVMEEVRRRDRDQDGNNGEFGKRSWRY
40	9.83E-19	90420107.ref	ZP_01228015.1	peroxidoredoxin, ahpC/TSA family	Aurantimonas sp. S185-9A1	FAVPGAFTPTCSNMHLPPVAVNVMGAWKANGNGELGKRSKRY
		90335644.gb	EAS49191.1	peroxidoredoxin, ahpC/TSA family	Aurantimonas sp. S185-9A1	FAVPGAFTPTCSNMHLPPVAVNVMGAWKANGNGELGKRSKRY
41	0	148653170.ref	YP_001280263.1	Redoxin domain protein	Psychrobacter sp. PRwf-1	FSLPGAFTPTCSTSHLPEFKALGVDECVSVNNGNVEFGMRSWRY
		148572254.gb	ABQ84313.1	Redoxin domain protein	Psychrobacter sp. PRwf-1	FSLPGAFTPTCSTSHLPEFKALGVDECVSVNNGNVEFGMRSWRY
42	2.38E-15	885714342.ref	ZP_01045330.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Nitrobacter sp. Nb-311A	FAVPGAFTGCHKQHLDPKGVIVSNVNLNAWKRDLTGIRSKRY
		85698789.gb	EAG36658.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Nitrobacter sp. Nb-311A	FAVPGAFTGCHKQHLDPKGVIVSNVNLNAWKRDLTGIRSKRY
43	6.87E-10	47756654.emb	CAG30523.1	mitochondrial peroxidoredoxin	Pisum sativum	DEGVFLPGAFTGCVSSKHVPCVAVNTVNAWAEKILGIRSERW
44	4.02E-19	91224060.ref	ZP_01259323.1	putative antioxidant	Vibrio alginolyticus 12G01	FAVPGAFTPTCSEAHLPVCSVSNVMQAWGEAQTGGGGIRSQRY
		91190971.gb	EAS77237.1	putative antioxidant	Vibrio alginolyticus 12G01	FAVPGAFTPTCSEAHLPVCSVSNVMQAWGEAQTGGGGIRSQRY

45	0	59801322	ref	YP_208034.1	putative peroxidexin family protein/glutaredoxin	Neisseria gonorrhoeae FA 1090	FSLPGAFTPTCSSHLPCVSVNVMNAWAAEEGNEGFGRSWRY
		59718217	gb	AAW89622.1	putative peroxidexin family protein/glutaredoxin	Neisseria gonorrhoeae FA 1090	KLGEFGLPGAFTGCTTAHVPCVSVNVMGAWGASTLIARSKRY
46	3.19E-18	84686320	ref	ZP_01013218.1	AhpC/TSA family protein	Rhodobacterales bacterium HTCC2654	
		84686477	gb	EAQ12949.1	AhpC/TSA family protein	Rhodobacterales bacterium HTCC2654	
47	3.98E-20	53720629	ref	YP_109615.1	putative redoxin	Burkholderia pseudomallei K96243	GPNAFGLPGAFTPTCSAQHVPCVAVNVMGAWGRDLMGIRSSRY
		99912740	ref	ZP_01319438.1	hypothetical protein Bpse1_03001003	Burkholderia pseudomallei 1655	
		100062405	ref	ZP_01324078.1	hypothetical protein BpseP_03002169	Burkholderia pseudomallei Pasteur	
		100124646	ref	ZP_01330132.1	hypothetical protein BpseS_03001844	Burkholderia pseudomallei S13	
		100236850	ref	ZP_01336544.1	hypothetical protein Bpse4_03001026	Burkholderia pseudomallei 406e	
		126440786	ref	YP_001060529.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei 668	
		16454386	ref	YP_001067780.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei 1106a	
		134280543	ref	ZP_01767254.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei 305	
		161360567	ref	ZP_02106429.1	AhpC/TSA family protein	Burkholderia pseudomallei 1106b	
		161373383	ref	ZP_02112938.1	AhpC/TSA family protein	Burkholderia pseudomallei 1710a	
		52211043	emb	CAH37031.1	putative redoxin	Burkholderia pseudomallei K96243	
		126220279	gb	ABN83785.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei 668	
		126228028	gb	ABN91568.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei 1106a	
		134248550	gb	EBA48633.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei 305	
		157808757	gb	EDO85927.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei 406e	
		157936860	gb	EDO94350.1	antioxidant, AhpC/TSA family	Burkholderia pseudomallei Pasteur	
48	4.49E-20	13476239	ref	NP_107809.1	peroxidexin-like protein	Mesorhizobium loti MAFF303099	FGVPGAFTPTCSNNHLPVSVNVMGAWARFTMGLRSKRFKPGV
		14027000	dbj	BAB53954.1	peroxidexin-like protein	Mesorhizobium loti MAFF303099	
49	1.20E-18	126355136	ref	ZP_01712142.1	Redoxin domain protein	Pseudomonas putida GB-1	FALPGAFTPTCSERHVPVSVNVMNAWGNLSLNGEMGRRSQRY
		126319646	gb	EAZ70498.1	Redoxin domain protein	Pseudomonas putida GB-1	
50	5.21E-20	88705528	ref	ZP_01103238.1	AhpC/TSA family protein	gamma proteobacterium KT 71	FAVPGAFTPGCSMTHLPCLSVNVMDAWGAKMGLRSORYGAGV
		88700041	gb	EAQ97150.1	AhpC/TSA family protein	Congregibacter litoralis K171	
51	0	20139171	gb	QGGLW7	PRDX5_CERAE Peroxiredoxin-5, mitochondrial precursor (F	Cercopithecus aethiops	FGVPGAFTPGCSKTHLPCLSVNVTVGEWGRAHGNRRLLKRFGTGL
		10305338	gb	AAG13453.2	AF110736_1, peroxidexin 5	Cercopithecus aethiops	
52	6.08E-12	115398884	ref	XP_001212447.1	conserved hypothetical protein	Aspergillus terreus NIH2624	TTGLVLENIQVPAAFSPACSSHTVPVTKAWASSLGNRSKRY
		114194843	gb	EAU36543.1	conserved hypothetical protein	Aspergillus terreus NIH2624	
53	0	113954203	ref	YP_729907.1	peroxidexin 2 family protein	Synechococcus sp. CC9311	FSLPGAFTPTCSSNHLPCLSVNVVMFQWKGKHNGEFGMRSWRY
		113881554	gb	ABI46512.1	peroxidexin 2 family protein	Synechococcus sp. CC9311	
54	5.44E-20	15641362	ref	NP_230994.1	antioxidant, putative	Vibrio cholerae O1 biovar eltor str.	FAVPGAFTPTCSEAHLPVSVNVMKAWGEAQDTGNGGVRSQRY
		116188557	ref	ZP_01478328.1	hypothetical protein VchoM_02002508	Vibrio cholerae MO10	
		116221105	ref	ZP_01486519.1	hypothetical protein VchoV5_02000836	Vibrio cholerae V51	
		153213487	ref	ZP_01948798.1	antioxidant, putative	Vibrio cholerae 1587	
		9655843	gb	AAF94508.1	antioxidant, putative	Vibrio cholerae O1 biovar eltor str.	
		124115951	gb	EAY34771.1	antioxidant, putative	Vibrio cholerae 1587	
55	4.31E-18	28901148	ref	NP_800803.1	putative antioxidant	Vibrio parahaemolyticus RIMD	FAVPGAFTPTCSEAHLPVAVNVMNAWGEAQDTGGGGVRSQRY
		28809661	dbj	BAC62636.1	putative antioxidant	Vibrio parahaemolyticus RIMD	
56	0	121604698	ref	YP_982027.1	Glutaredoxin-family domain protein	Polaromonas naphthalenivorans CJ2	FSLPGAFTPTCSSHLPCISVNVNMEWGQAQNGNEFGKRSWRY
		120593667	gb	ABM37106.1	Glutaredoxin-family domain protein	Polaromonas naphthalenivorans CJ2	
57	0	119181446	ref	XP_001241932.1	hypothetical protein CIMG_05828	Coccidioides immitis RS	FSLPGAFTPTCSASHLPVAVL VMSAWGKANVTGDAGERTGRY
		90300718	gb	EAS30349.1	hypothetical protein CIMG_05828	Coccidioides immitis RS	
58	0	32034501	ref	ZP_00134673.1	COG0678; Peroxiredoxin	Actinobacillus pleuropneumoniae	FSLPGAFTPTCSSHLPCMSVNVNMAWKAAGNGNEFGKRSWRY
59	0	66773128	ref	NP_001019577.1	hypothetical protein LOC554105	Danio rerio	FGVPGAFTPGCSKTHLPCISVNVMSAWGKGNLRSQRYGTGL
		63102025	gb	AAH95756.1	Zgc_112318	Danio rerio	
60	8.84E-17	117620462	ref	YP_855809.1	peroxidexin	Aeromonas hydrophila subsp.	FAVPGAFTPTCSNAHLPCLSVNVNMAWQDAQETGAGGVRAQRF
		117561869	gb	ABK38817.1	peroxidexin	Aeromonas hydrophila subsp.	
61	1.50E-21	78065127	ref	YP_367896.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Burkholderia sp. 383	FGLPGAFTPTCSAQHVPCVSVNVMGAWGRDLMGIRSLRYDGGV
		77965872	gb	ABB07252.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Burkholderia sp. 383	
62	0	119469938	ref	ZP_01612743.1	putative peroxidexin/glutaredoxin family protein	Alteromonadales bacterium TW-7	FSLPGAFTPTCSSHLPCLSVNVNMAWAEHQNGNEFGKRSWRY
		119446648	gb	EAW27921.1	putative peroxidexin/glutaredoxin family protein	Alteromonadales bacterium TW-7	
63	0	115681541	ref	XP_796387.2	PREDICTED: similar to peroxidexin V protein	Strongylocentrotus purpuratus	KTGVFAVPGAFTPGCSKTHLPDFDLKAKCVAVNVMMAWGAH
		115931401	ref	XP_001183945.1	PREDICTED: similar to peroxidexin V protein	Strongylocentrotus purpuratus	
64	1.26E-16	84686939	ref	ZP_01014823.1	peroxidexin/glutaredoxin family protein	Rhodobacterales bacterium HTCC2654	FSLPGAFTPTCSTYQLPCMSVNVNMAWQDAQGSSEFGARSWRY
		84665136	gb	EAQ11616.1	peroxidexin/glutaredoxin family protein	Rhodobacterales bacterium HTCC2654	
65	9.28E-15	70392559	ref	XP_751128.1	AhpC/TSA family protein	Aspergillus fumigatus Af293	GKGIIGVPAAFSPACSSHPVSVNVMKAWGVSLGNORSKRY

66	3.49E-21	6684876.1 gb	EAL89090.1	AhpC/TSA family protein	Aspergillus fumigatus Af293	FSLPGAFTPTCSNFQLPCLSVNVMNAWGKKQFGMRSWRYDPYE
		121602101 ref	YP_989434.1	putative peroxidoxin	Bartonella bacilliformis KC583	
		120614278 gb	ABM44879.1	putative peroxidoxin	Bartonella bacilliformis KC583	
67	0	46156414 ref	YP_00132875.2	COG0678: Peroxidoxin	Haemophilus somnus 2336	FSLPGAFTPTCSATHLPCVSNVMNAWKADQNGNGEFGKRSWRY
68	0	113474068 ref	YP_720129.1	Redoxin	Trichodesmium erythraeum IMS101	FALPGAFTPTCSSTHLPCVSNVMFQWKGKQNGNGEFGMRSWRY
		110165116 gb	ABG49656.1	Redoxin	Trichodesmium erythraeum IMS101	
69	0	118484088 gb	ABK93929.1	unknown	Populus trichocarpa	FGVPGAFTPTCSLKHVPCISVNMKAWAKTYLGLTRSRFRGGGE
70	1.35E-15	119878173 ref	XP_01645130.1	Redoxin	Stenotrophomonas maltophilia R551-3	GPLFAVPGAFTPTCSARHLPCVAVNVMKAWAQQMGIKRSRFR
		119819294 gb	EAX21938.1	Redoxin	Stenotrophomonas maltophilia R551-3	
71	2.99E-10	3914387 sp	P56578	MAF3_MALFU Putative peroxidoxin (Thioredoxin reduced)	Malassezia furfur	VAVPGAFTPTCTANHVPIVANVLSAWGITEMLGLRTARYDEGE
		3445492 dbj	BAA32436.1	MF2	Malassezia furfur	
72	0	158302218 ref	XP_001238545.2	AGAP001325-PA	Anopheles gambiae str. PEST	FAVPGAFTPGCSKTHLPCVSNVMSAWGKQHGGLRSKRYGTGL
		157012845 gb	EAU75715.2	AGAP001325-PA	Anopheles gambiae str. PEST	
73	1.59E-16	114762729 ref	YP_01442163.1	antioxidant, AhpC/Tsa family protein	Roseovanius sp. HCC2601	FALPGAFTPTCSTYQLPCLSVNFGARSWRYVIAEWFEEPPDYG
		114544639 gb	EAU147645.1	antioxidant, AhpC/Tsa family protein	Roseovanius sp. HCC2601	
74	6.13E-18	4704732 gb	AAD28243.1	AF121356_1 peroxidoxin TPx2	Arabidopsis thaliana	FGVPGAFTPTCSMSHVCFVSNVMKAWGKTYGSGESGSSGRF
75	3.76E-22	164562985 ref	YP_02208802.1	Redoxin domain protein	Polynucleobacter necessarius STIR1	GNPAFALPGAFTPTCSAKHVPVSNVVMGAWGRDQLGVRSDRY
		164505711 gb	EDQ93912.1	Redoxin domain protein	Polynucleobacter necessarius STIR1	
76	4.75E-19	154720991 gb	ABS84672.1	AhpC/TSA-family protein	Tetrahobacter kashmirensis	FAVPGAFTPTCTTKHVVCVAVNVMGAWGRDITLGVRSRRYEJGGE
77	0	93006717 ref	YP_581154.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ MA	Psychrobacter cryohalolentis K5	FSLPGAFTPTCSTSHLPEFKALGIDECISVNGNGEFGMRSWRY
		92394395 gb	ABE75670.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ MA	Psychrobacter cryohalolentis K5	
78	0	78364922 gb	ABB42828.1	peroxisomal matrix protein	Coccidioides posadasii	FSLPGAFTPTCSASHLPVAVLVMSAWGKANVTGDAGERTGRY
79	0	153302024 ref	YP_01982871.1	peroxidoxin family protein/glutaredoxin	Vibrio cholerae 623-39	FSLPGAFTPTCSSTHLPCVSNVMAWKDDQNGNGEFGKRSWRY
		148874307 gb	EDL72442.1	peroxidoxin family protein/glutaredoxin	Vibrio cholerae 623-39	
80	0	15603212 ref	NP_246286.1	hypothetical protein PM1347	Pasteurella multocida subsp.	FSLPGAFTPTCSSTHLPCMSVNMNAWKADQNGNGEFGKRSWRY
		12721717 gb	AAK03431.1	unknown	Pasteurella multocida subsp.	
81	1.16E-20	17547557 ref	NP_520989.1	PROBABLE TYPE 2 PEROXIREDOXIN PROTEIN	Ralstonia solanacearum GM1000	GNPAFALPGAFTPTCSARHVPVSNVVMGAWARAQMGVRSQRY
		17429861 emb	CAD16545.1	putative thioredoxin fold-harboring protein	Ralstonia solanacearum	
82	0	33593679 ref	NP_881323.1	AhpC/TSA-family protein	Bordetella pertussis Tohama I	GTLTFAVPGAFTPTCSAKHLPVAVNVMGAWGREGMIGVRSQRY
		33563752 emb	CAE42992.1	AhpC/TSA-family protein	Bordetella pertussis Tohama I	
83	1.05E-15	27376428 ref	NP_767957.1	peroxidoxin	Bradyrhizobium japonicum USDA 110	GPQVFAVPGAFTGTCHEKMLHLPIISVNVNNAWKRDITLGRSKRY
		27349568 dbj	BAC46582.1	peroxidoxin	Bradyrhizobium japonicum USDA 110	
84	3.10E-19	116483155 ref	YP_01473217.1	hypothetical protein VE-x2w_02004238	Vibrio sp. Ex25	FAVPGAFTPTCSEAHLPVSNVVMQAWGEAQDTGGGGIRSQRY
		151939892 gb	EDN58719.1	Peroxiredoxin	Vibrio sp. Ex25	
85	3.87E-20	27367181 ref	NP_762708.1	Peroxiredoxin	Vibrio vulnificus CMCP6	FAVPGAFTPTCSEAHLPVSNVVMKAWGEAQDTAGGGLRSQRY
		37676896 ref	NP_937292.1	peroxidoxin	Vibrio vulnificus YJ016	
		27358749 gb	AAQ07698.1	AE016810_201 Peroxiredoxin	Vibrio vulnificus CMCP6	
		37201440 dbj	BAC97262.1	peroxidoxin	Vibrio vulnificus YJ016	
86	2.43E-12	116498761 gb	EAU81656.1	predicted protein	Coprinopsis cinerea okayama7#130	SPGEIGLPGAFTTPCNGHVPVAVIANNVTKAWKEALGGPRSKRF
87	4.48E-14	163740446 ref	YP_02147840.1	AhpC/TSA family protein	Phaeobacter gallaeciensis 2.10	SVGEFAVPGAFTPTCHSAHVPCVAVNVMKAWSEATLIGRSLRY
		161386304 gb	EDQ10679.1	AhpC/TSA family protein	Phaeobacter gallaeciensis 2.10	
88	0	29726703 pdb	1NM3	A Chain A. Crystal Structure Of Haemophilus influenzae Hybrid	Haemophilus influenzae	FSLPGAFTPTCSSSLLPWSVNFVNAWKEDENGNGEFGKRSWRY
		29726704 pdb	1NM3	B Chain B. Crystal Structure Of Haemophilus influenzae Hybrid	Haemophilus influenzae	
89	0	153802986 ref	YP_01957572.1	peroxidoxin family protein/glutaredoxin	Vibrio cholerae MZO-3	FSLPGAFTPTCSSTHLPCVSNVNMNAWKDDQNGNGEFGKRSWRY
		124121470 gb	EAY40213.1	peroxidoxin family protein/glutaredoxin	Vibrio cholerae MZO-3	
90	8.86E-13	116792304 gb	ABK26311.1	unknown	Picea sitchensis	DEGVFGLPGAFTVCSAQHVPCVSNVVMNAWKAEKLLGHRSGRW
91	1.22E-12	119467218 ref	XP_001257415.1	allergen Asp F3	Neosartorya fischeri NRRL 181	DKGEFALPGAFTVCSARHVPVAVLVMSAWGKANEEGRTKRY
		119405567 gb	EAW15518.1	allergen Asp F3	Neosartorya fischeri NRRL 181	
92	2.89E-16	90416592 ref	YP_01224523.1	antioxidant, AhpC/Tsa family protein	marine gamma proteobacterium	FAVPGAFTPTCSAAHLPCMSVNMVHAWGOSAMGTRSQRFDAGA
		90331791 gb	EAS47019.1	antioxidant, AhpC/Tsa family protein	marine gamma proteobacterium	
93	0	110835493 ref	YP_694352.1	peroxidoxin family protein/glutaredoxin, putative	Alcanivorax borkumensis SK2	FALPGAFTPTCSSTHLPCVSNVVMNAWGDQNGNGEFGPRSWRY
		110648604 emb	CAL18080.1	peroxidoxin family protein/glutaredoxin, putative	Alcanivorax borkumensis SK2	
94	0	152978074 ref	YP_001343703.1	glutaredoxin-family domain protein	Actinobacillus succinogenes 130Z	FSLPGAFTPTCSSTHLPCMSVNMNAWKADQNGNGEFGKRSWRY
		150839797 gb	ABR73768.1	glutaredoxin-family domain protein	Actinobacillus succinogenes 130Z	
95	9.67E-16	86137169 ref	YP_01055747.1	AhpC/TSA family protein	Roseobacter sp. MED193	STGEFAVPGAFTPTCHSAHVPCVSNVVMQAWGEATLIGRSLRY
		85628493 gb	EAC046690.1	AhpC/TSA family protein	Roseobacter sp. MED193	
96	2.81E-12	67526459 ref	XP_661291.1	hypothetical protein AN3687.2	Aspergillus nidulans FGSC A4	GKGVIGVPAAFSPACSSTHVPVAVNVTKAWGTTLGNQSKRY

97	1.08E-18	40740705.gb	EA459895.1	hypothetical protein AN3687.2	Aspergillus nidulans FGSC A4	FAVPGAFPTCSLNHLPLVAVNVMGAWAQSTGEGKLGVRSKRY
		23501379.ref	NP_697506.1	ahpC/TSA family protein	Bruceella suis 1330	
		82699385.ref	YP_413959.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Bruceella melitensis biovar. Abortus 2308	
		161618449.ref	YP_001592336.1	Redoxin domain protein	Bruceella canis ATCC 23365	
		163842759.ref	YP_001627163.1	thiol peroxidase	Bruceella suis ATCC 23445	
		23347274.gb	AAN29421.1	ahpC/TSA family protein	Bruceella suis 1330	
		826165486.emb	CAJ10460.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Bruceella melitensis biovar. Abortus 2308	
		161335260.gb	ABX61565.1	Redoxin domain protein	Bruceella canis ATCC 23365	
		163673482.gb	ABY37593.1	thiol peroxidase	Bruceella suis ATCC 23445	
98	0	157115218.ref	XP_001658149.1	peroxidoredoxin 5, prdx5	Aedes aegypti	FAVPGAFPTGCSKTHLPCVSNVMSAWGKQHGGLRSKRYGTGL
		108876980.gb	EAT41205.1	peroxidoredoxin 5, prdx5	Aedes aegypti	
99	4.28E-20	86356614.ref	YP_468506.1	probable peroxidoredoxin protein	Rhizobium etli CFN 42	GPVEFAVPGAFPTCSLNHLPLVAVNVMGAWAQSSLGLRSKRY
		86280716.gb	ABC89779.1	probable peroxidoredoxin protein	Rhizobium etli CFN 42	
100	1.09E-14	91978488.ref	YP_571147.1	peroxidoredoxin-like protein	Rhodopseudomonas palustris BisB5	DGVEFAVPGAYTGTCHKMHVPIVSNVNMNAWKRDLTGLTRSLRY
		91684944.gb	ABE41246.1	peroxidoredoxin-like protein	Rhodopseudomonas palustris BisB5	
101	0	114051191.ref	NP_001040386.1	peroxidoredoxin	Bombyx mori	FAVPGAFPTGCSKTHLPCVSNVMAAWGAHQHGGFRSKRFGTGL
		95102710.gb	ABF51296.1	peroxidoredoxin	Bombyx mori	
102	1.49E-17	86138369.ref	EP_01056943.1	peroxidoredoxin/glutaredoxin family protein	Roseobacter sp. MED193	FSLPGAFPTCSTYQLPCMSVNVNKNKWAESQSGSEFGARSWRY
		85824894.gb	EA045095.1	peroxidoredoxin/glutaredoxin family protein	Roseobacter sp. MED193	
103	1.97E-10	146413901.ref	XP_001482921.1	hypothetical protein PGUG_04876	Pichia guilliermondii ATCC 6260	VAVPGAFPTCTENHIPVLNAWAKLLDGGADLSVDE/DRSVRY
		146392620.gb	EDK40778.1	hypothetical protein PGUG_04876	Pichia guilliermondii ATCC 6260	
104	0	88794415.ref	DPK_01110123.1	putative peroxidoredoxin/glutaredoxin family protein	Altomonas macleodii 'Deep ecotype'	FSLPGAFPTCSSTHLPCMSVNVNMAWAADGNGEFGKRSWRY
		88774181.gb	EAR05438.1	putative peroxidoredoxin/glutaredoxin family protein	Altomonas macleodii 'Deep ecotype'	
105	0	146345491.sp	Q9BG11	PRDX5_BOVIN Peroxidoredoxin-5, mitochondrial precursor (P	Bos taurus	FGLPGAFPTGCSKTHLPLTVNVTEEWARAHGNHRLKRFGTGL
106	9.80E-22	114328542.ref	YP_745699.1	peroxidoredoxin	Granulibacter thebesdensis CGDNIH1	GPKEFAVPGAFPTCSAKHLPCLSVNVMGAWAKEQLGVRSQRF
		114316716.gb	ABI62776.1	peroxidoredoxin	Granulibacter thebesdensis CGDNIH1	
107	1.12E-17	124268617.ref	YP_001022621.1	AhpC/TSA-family protein	Methylobium petroleiphilum PM1	VEGEFALPGAFPTCSAQHVPCLSVNVMGAWGREQMGRLRSQRY
		124261392.gb	ABM96386.1	AhpC/TSA-family protein	Methylobium petroleiphilum PM1	
108	2.32E-22	70953094.ref	XP_7456670.1	antioxidant protein	Plasmodium chabaudi	DTHIEISLP/GAF/TPLCTSKMIPG/ITNNVLKSWFKDMMGMRPWRY
		56826067.emb	CAH77947.1	antioxidant protein, putative	Plasmodium chabaudi	
109	0	77976811.ref	ZP_00832281.1	COG0678; Peroxidoredoxin	Yersinia intermedia ATCC 29909	FSLPGAFPTCSSSHLPCVSNVNMNAWKADGNGEFGPRSWRY
110	0	113869220.ref	YP_727709.1	Peroxidoredoxin	Ralstonia eutropha H16	FGLPGAFPTCSAKHVPCLSVNVMGAWGREQMGVRSKRYAFGE
		113297996.emb	CAJ94341.1	Peroxidoredoxin	Ralstonia eutropha H16	
111	0	113460184.ref	YP_718241.1	peroxidoredoxin	Haemophilus somnus 129PT	FSLPGAFPTCSATHLPCVSNVNMNAWKADGNGEFGKRSWRY
		AB124316.1	AB124316.1	peroxidoredoxin	Haemophilus somnus 129PT	
112	2.79E-18	92113257.ref	YP_573185.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Chromohalobacter salexigenis DSM	DTGEFAVPGAFPTGCSNTHMPCLAVNVLGAWQQDQMGTRSQRY
		91796347.gb	ABE58486.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Chromohalobacter salexigenis DSM	
113	1.96E-13	163698443.ref	ZP_02117306.1	alkyl hydroperoxide reductase	Methylobacterium nodulans ORS 2060	GPAAVAVPGAFPTCTHRNHLPLVTSVNVLDAWSKAALGVRSKRY
		162435465.gb	EDQ46046.1	alkyl hydroperoxide reductase	Methylobacterium nodulans ORS 2060	
114	4.47E-10	125569838.gb	EAZ11353.1	hypothetical protein OsJ_0011178	Oryza sativa (japonica cultivar-group)	YGGSAAAAFGLPGAYTGYCSQAHPVPCVSNLGRSRHRWVPGE
115	1.70E-12	115443134.ref	XP_001218374.1	hypothetical protein ATEG_09752	Aspergillus terreus NH2624	FSVPGAFPTCSVNHMPVAVVMSAWAKANNNGRTGRYGAVE
		1141788243.gb	EAU29943.1	hypothetical protein ATEG_09752	Aspergillus terreus NH2624	
116	0	28899527.ref	NP_799132.1	peroxidoredoxin family protein/glutaredoxin	Vibrio parahaemolyticus RIMD	FSLPGAFPTCSSSHLPCVSNVNMNAWKHDQNGEFGKRSWRY
		153839012.ref	ZP_01991679.1	AhpC/TSA family/glutaredoxin domain protein	Vibrio parahaemolyticus AQ3810	
		28807763.dbj	BAC61016.1	peroxidoredoxin family protein/glutaredoxin	Vibrio parahaemolyticus RIMD	
		149747519.gb	EDM58459.1	AhpC/TSA family/glutaredoxin domain protein	Vibrio parahaemolyticus AQ3810	
117	9.88E-11	119388056.ref	YP_916112.1	Redoxin domain protein	Paracoccus denitrificans PD1222	GPEEFAVPGAYTPTCTNAHMPCTVNVAGKWAADTVNGRSKRY
		119374823.gb	ABL70416.1	thiol peroxidase (atypical 2-Cys peroxidoredoxin)	Paracoccus denitrificans PD1222	
118	6.86E-20	116259810.ref	YP_766648.1	putative thioredoxin family protein	Rhizobium leguminosarum bv. viciae	GPVEFAVPGAFPTCSLNHLPLVAVNVMGAWAQSSLGLRSKRY
		115256458.emb	CAK06534.1	putative thioredoxin family protein	Rhizobium leguminosarum bv. viciae	
119	3.78E-19	149915469.ref	ZP_01903996.1	antioxidant, AhpC/Tsa family, putative	Roseobacter sp. Azwk-3b	FAVPGAFPTCHSAHVPCLSVNMRWAGKDTLVARSKRYGTCE
		149810758.gb	EDM70599.1	antioxidant, AhpC/Tsa family, putative	Roseobacter sp. Azwk-3b	
120	1.44E-21	118714451.ref	ZP_01567005.1	Redoxin	Burkholderia cenocepacia MC0-3	FGLPGAFPTCSAQHVPCLSVNVMGAWGRDLMGIRSLRYDGGV
		118648098.gb	EAV54909.1	Redoxin	Burkholderia cenocepacia MC0-3	
121	0	109109506.ref	XP_001114433.1	PREDICTED: similar to Peroxidoredoxin-5, mitochondrial prec	Macaca mulatta	FEGEFVPGAFPTGCSKTHLPGAEALAKACLNVNVTGEWGRAH
122	4.15E-18	61680402.pdb	1XIY	A Chain A, Crystal Structure Of Plasmodium Falciparum Ant	Plasmodium falciparum	DTHIEISLP/GAF/TPTSKMIPG/ITNNVLKSWFKMGMMPWRFF
		61680403.pdb	1XIY	B Chain B, Crystal Structure Of Plasmodium Falciparum Ant	Plasmodium falciparum	

123	0	156972416	ref	YP_001443323.1	glutaredoxin	Vibrio harveyi ATCC BAA-1116	FSLPGAFTPTCSSSHQPVCVSVNVMNAWKADQNGGFEFGKRSWRY
		156524010	gb	ABU69096.1	hypothetical protein VIBHAR_00036	Vibrio harveyi ATCC BAA-1116	FSLPGAFTPTCSSSHQPVCVSVNVMNAWKADQNGGFEFGKRSWRY
124	0	116095042	ref	YP_840618.1	Peroxiredoxin	Ralstonia eutropha H16	FGLPGAFTPTCSSTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
		113529541	emb	CAJ95888.1	Peroxiredoxin	Ralstonia eutropha H16	FGLPGAFTPTCSSTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
125	3.18E-22	18408870	ref	NP_564763.1	peroxiredoxin type 2, putative	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPCFSVNMKAWGKTYGSGGELGIRSRFF
		84028276	sp	O22711	PRX2D_ARATH Peroxiredoxin-2D (Peroxiredoxin IID) (Thiol unknown protein	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPCFSVNMKAWGKTYGSGGELGIRSRFF
		51970548	dbj	BAD43966.1	unknown protein	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPCFSVNMKAWGKTYGSGGELGIRSRFF
126	0	94313811	ref	YP_587020.1	Glutaredoxin-like region	Ralstonia metallidurans CH34	FSLPGAFTPTCSSTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
		94317663	gb	ABF11751.1	Glutaredoxin-like region	Ralstonia metallidurans CH34	FSLPGAFTPTCSSTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
127	0	93312053	ref	YP_585263.1	peptidase S8 and S53, subtilisin, kexin, sedolisin	Ralstonia metallidurans CH34	FGLPGAFTPTCSAKHVPCHSVNMGAWGREQQLGVRKRYEPGE
		93355905	gb	ABF09994.1	peptidase S8 and S53, subtilisin, kexin, sedolisin	Ralstonia metallidurans CH34	FGLPGAFTPTCSAKHVPCHSVNMGAWGREQQLGVRKRYEPGE
128	0	67923152	ref	ZP_00516641.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Crocospaera watsonii WH 8501	FSLPGAFTPTCSSNHLPCVSVNVMFQWKGKQKQNGGFEFGMRSWRY
		67854994	gb	EAM50264.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Crocospaera watsonii WH 8501	FSLPGAFTPTCSSNHLPCVSVNVMFQWKGKQKQNGGFEFGMRSWRY
129	0	6746357	gb	AAF27532.1	AF124994_1 peroxisomal membrane protein 20	Mus musculus	FGVPGAFTPGCSKTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
		10129957	gb	AAAG13450.1	AF110733_1 peroxiredoxin 5	Mus musculus	FGVPGAFTPGCSKTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
		12832325	dbj	BAB22058.1	unnamed protein product	Mus musculus	FGVPGAFTPGCSKTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
		12833934	dbj	BAB22720.1	unnamed protein product	Mus musculus	FGVPGAFTPGCSKTHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
130	0	90413602	ref	ZP_01221592.1	Putative peroxiredoxin/glutaredoxin family protein	Photobacterium profundum 3TCK	FSLPGAFTPTCSSSHLPCVSVNVMNAWKADQNGGFEFGPRSWRY
		90325375	gb	EAS41864.1	Putative peroxiredoxin/glutaredoxin family protein	Photobacterium profundum 3TCK	FSLPGAFTPTCSSSHLPCVSVNVMNAWKADQNGGFEFGPRSWRY
131	1.07E-09	7670411	dbj	BAA95057.1	Mus musculus peroxiredoxin V (PrxV)	Mus musculus	VLGCKASSVLAGRAGRKIPSVFEGVPGAFTPGCGSKVRLLLGPGV
		148701309	gb	EDL33256.1	peroxiredoxin 5, isoform CRA_a	Mus musculus	VLGCKASSVLAGRAGRKIPSVFEGVPGAFTPGCGSKVRLLLGPGV
132	0	149910252	ref	ZP_01898897.1	glutaredoxin	Montella sp. PE36	FSLPGAFTPTCSSSHLPCVSVNVMNAWKDQNGGFEFGKRSWRY
		149806721	gb	EDM66686.1	glutaredoxin	Montella sp. PE36	FSLPGAFTPTCSSSHLPCVSVNVMNAWKDQNGGFEFGKRSWRY
133	1.26E-15	83594387	ref	YP_428139.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Rhodospirillum rubrum ATCC 11170	FAVPGAFTPTCSDSHVPCVAVNVLAAWSKALGTVELGKRFQRC
		83571301	gb	ABC23852.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Rhodospirillum rubrum ATCC 11170	FAVPGAFTPTCSDSHVPCVAVNVLAAWSKALGTVELGKRFQRC
134	0	4928472	gb	AAD333602.1	AF133302_1 type 2, peroxiredoxin	Brassica rapa subsp. pekinensis	FGVPGAFTPTCSMKHVPCFSVNMKAWGKTYGSGGELGVRSRFF
		83032224	gb	ABB97029.1	unknown	Brassica rapa	FGVPGAFTPTCSMKHVPCFSVNMKAWGKTYGSGGELGVRSRFF
135	3.67E-16	114800089	ref	YP_759774.1	antioxidant, AhpC/TSA family	Hyphomonas neptunium ATCC 15444	FAVPGAFTPTCSARHLPCVSVNVMGAWGKSSGNGAMGKRSQRY
		114740263	gb	ABI78388.1	antioxidant, AhpC/TSA family	Hyphomonas neptunium ATCC 15444	FAVPGAFTPTCSARHLPCVSVNVMGAWGKSSGNGAMGKRSQRY
136	0	78484484	ref	YP_390409.1	Glutaredoxin-like region	Thiomicrospira crunogena XCL-2	FSLPGAFTPTCSSSHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
		78362770	gb	ABB40735.1	Glutaredoxin-like region	Thiomicrospira crunogena XCL-2	FSLPGAFTPTCSSSHLPCVSVNVMNEWAKDQNGGFEFGKRSWRY
137	2.75E-21	84360666	ref	ZP_00985362.1	COG0678: Peroxiredoxin	Burkholderia dolosa AUO158	GFNAFGLPGAFTPTCSAQHVPCVSVNVMGAWGRLDMGIRSLRY
138	0	83643062	ref	YP_431497.1	Peroxiredoxin	Haella chejuensis KCCT 2396	FALPGAFTPTCSSTHLPCVSVNVMNSWKADQNGGFEFGKRSWRY
		83631105	gb	ABC27072.1	Peroxiredoxin	Haella chejuensis KCCT 2396	FALPGAFTPTCSSTHLPCVSVNVMNSWKADQNGGFEFGKRSWRY
139	1.27E-20	91786177	ref	YP_547129.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Polaromonas sp. JS666	FALPGAFTPTCSAKHVPCVSVNVMGAWARDQMGLRSNRYGPGK
		91695402	gb	ABE42231.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Polaromonas sp. JS666	FALPGAFTPTCSAKHVPCVSVNVMGAWARDQMGLRSNRYGPGK
140	0	118484484	gb	ABK94117.1	unknown	Populus trichocarpa	FGVPGAFTPTCSLKHVPCVSVNVMKAWAKSYLGRSRRFEGGGE
141	0	153007937	ref	YP_001369152.1	Redoxin domain protein	Ochrobactrum anthropi ATCC 49188	FAVPGAFTPTCSLHPLPVAVNVMGAWAQSTGEGKLGIRSKRY
		151559825	gb	ABS13323.1	Redoxin domain protein	Ochrobactrum anthropi ATCC 49188	FAVPGAFTPTCSLHPLPVAVNVMGAWAQSTGEGKLGIRSKRY
142	3.93E-09	116203717	ref	XP_001227669.1	hypothetical protein CHGG_09742	Chaetomium globosum CBS 148.51	PLASMATATIGVPAAFSPACSA THVDPAPAGGDRSKRYKVSVA
		88175870	gb	EAG083338.1	hypothetical protein CHGG_09742	Chaetomium globosum CBS 148.51	PLASMATATIGVPAAFSPACSA THVDPAPAGGDRSKRYKVSVA
143	1.62E-11	150951285	ref	XP_001387583.2	predicted protein	Pichia stipitis CBS 6054	TAVPGAFTPTCTEQHIPVLSANVMAAWGKALDPLAFGVRTARY
		149388467	gb	EAZ63560.2	predicted protein	Pichia stipitis CBS 6054	TAVPGAFTPTCTEQHIPVLSANVMAAWGKALDPLAFGVRTARY
144	0	114638293	ref	XP_001164621.1	PREDICTED: peroxiredoxin 5 isoform 5	Pan troglodytes	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		69122338	ref	NP_036226.1	peroxiredoxin 5 precursor, isoform a	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
145	0	20147173	sp	P30044	PRDX5_HUMAN Peroxiredoxin-5, mitochondrial precursor (	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		6103724	gb	AAF03750.1	AF110731_1 antioxidant enzyme B166	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		8745394	gb	AAF78899.1	AF231705_1 Alu co-repressor 1	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		9802048	gb	AAF99605.1	AF242525_1 hypothetical protein SBB110	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		48146523	emb	CAG33484.1	PRDX5	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		77864624	gb	ABB05181.1	peroxiredoxin 5	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		83405871	gb	AAI10984.1	Peroxiredoxin 5	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		109731135	gb	AAI13726.1	Peroxiredoxin 5	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
		109731385	gb	AAI13724.1	Peroxiredoxin 5	Homo sapiens	FGVPGAFTPGCSKTHLPCVSVNVTGEWGRAHGNRRLKRFGTGL
146	0	145636341	ref	ZP_01791043.1	hypothetical protein CGSHIAA_09567	Haemophilus influenzae PittAA	FSLPGAFTPTCSSSHLPCVSVNVMNAWKDEGEGFEFGKRSWRY
		145267347	gb	EDK07349.1	hypothetical protein CGSHIAA_09567	Haemophilus influenzae PittAA	FSLPGAFTPTCSSSHLPCVSVNVMNAWKDEGEGFEFGKRSWRY
147	5.00E-14	145610855	ref	XP_368384.2	hypothetical protein MGG_00860	Magnaporthe oryzae 70-15	IGVPAAFSGACSTSHIPDVQVSVNVMKAWAEQMGNDRSKRY

148	1.12E-11	145018196.gb	EDK02475.1	hypothetical protein MGG_00860	Magnaporthe grisea 70-15	VGAGGGQAGNKVNFVPGVAFPTGCSKVRLLNRRLLKRFGL
149	0	32452260.ref	NP_857634.1	peroxiredoxin 5 precursor, isoform b	Homo sapiens	FSLPGAFTPTCSSTHLPVCSVNMVMEWAKDQNGDFGKRSWRY
		34497491.ref	NP_901706.1	probable peroxiredoxin/glutaredoxin family protein	Chromobacterium violaceum ATCC	IGVPGAFSPACSAHVPPVAVNVTKAWGEQLSTGAGNERSKRY
150	3.37E-14	34103346.gb	AAQ059708.1	probable peroxiredoxin/glutaredoxin family protein	Chromobacterium violaceum ATCC	IGVPGAFSPACSAHVPPVAVNVTKAWGEQLSTGAGNERSKRY
		68480311.ref	XP_715859.1	putative peroxiredoxin	Candida albicans SC5314	IGVPGAFSPACSAHVPPVAVNVTKAWGEQLSTGAGNERSKRY
		46437502.gb	EAK96847.1	potential peroxiredoxin	Candida albicans SC5314	IGVPGAFSPACSAHVPPVAVNVTKAWGEQLSTGAGNERSKRY
151	2.31E-12	121719390.ref	XP_001276394.1	allergen, putative	Aspergillus clavatus NRRL 1	FSVPGAFPTCSVNHMPVAVVVMVSAWGWKANNNGRTGRYGSGA
		119404592.gb	EAW14968.1	allergen, putative	Aspergillus clavatus NRRL 1	FSVPGAFPTCSVNHMPVAVVVMVSAWGWKANNNGRTGRYGSGA
152	1.22E-14	113935915.ref	ZP_01421811.1	conserved hypothetical protein	Caulobacter sp. K31	VFKTRVRDEFGLPGAFTPTCSNEQTPCLAVNFYRSWRYPDYD
		11329643.gb	EAU10717.1	conserved hypothetical protein	Caulobacter sp. K31	VFKTRVRDEFGLPGAFTPTCSNEQTPCLAVNFYRSWRYPDYD
153	1.40E-17	5696971.ref	YP_167333.1	antioxidant, AhpC/Tsa family	Silicibacter pomeroyi DSS-3	FSLPGAFTPTCSTYQLPCMSVNMVNMKVAEAGSGGEFGFRSWRY
		56678708.gb	AAV95374.1	antioxidant, AhpC/Tsa family	Silicibacter pomeroyi DSS-3	FSLPGAFTPTCSTYQLPCMSVNMVNMKVAEAGSGGEFGFRSWRY
154	0	109899643.ref	YP_662898.1	Glutaredoxin-family domain protein	Pseudoalteromonas atlantica T6c	FSLPGAFTPTCSSTHLPVCSVNMVNAWAQDQFGKRSWRYDPFE
		109701924.gb	ABG41844.1	Glutaredoxin-family domain protein	Pseudoalteromonas atlantica T6c	FSLPGAFTPTCSSTHLPVCSVNMVNAWAQDQFGKRSWRYDPFE
155	1.36E-21	16127624.ref	NP_422188.1	AhpC/TSA family protein	Caulobacter crescentus CB15	GFAPFAVPGAFTPTCSAKHLPVCSVNMVNAWAQDQFGKRSWRY
		13425104.gb	AAK25356.1	AhpC/TSA family protein	Caulobacter crescentus CB15	GFAPFAVPGAFTPTCSAKHLPVCSVNMVNAWAQDQFGKRSWRY
156	0	162666798.gb	ED053443.1	predicted protein	Physcomitrella patens subsp. patens	FGVPGAFTPTCSLKHVPCITVNVVKEWETKYMGRVRSRYGGGL
157	1.25E-20	115444771.ref	NP_001046165.1	Os02g0192700	Oryza sativa (japonica cultivar-group)	ATGVFAVPGAFTPTCSQKHLPCVSNVVMRAWKESLLGVRSRRY
		75139348.sp	QJ7F8S5	PR2E2_ORYSJ Peroxiredoxin-2E-2, chloroplast, precursor	Oryza sativa (japonica cultivar-group)	ATGVFAVPGAFTPTCSQKHLPCVSNVVMRAWKESLLGVRSRRY
		46389828.dbj	BAD15391.1	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)	ATGVFAVPGAFTPTCSQKHLPCVSNVVMRAWKESLLGVRSRRY
		50726415.dbj	BAD34026.1	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)	ATGVFAVPGAFTPTCSQKHLPCVSNVVMRAWKESLLGVRSRRY
		113535696.dbj	YAF08079.1	Os02g0192700	Oryza sativa (japonica cultivar-group)	ATGVFAVPGAFTPTCSQKHLPCVSNVVMRAWKESLLGVRSRRY
158	2.47E-15	148552945.ref	YP_001260527.1	Redoxin domain protein	Spingomonas wittichii RW1	HTGEFALPGAFTPTCSTEQCPCLSVNMVYQWAKQLFGDRSWRY
		148498135.gb	ABQ066389.1	Redoxin domain protein	Spingomonas wittichii RW1	HTGEFALPGAFTPTCSTEQCPCLSVNMVYQWAKQLFGDRSWRY
159	6.26E-09	50302773.ref	XP_451323.1	unnamed protein product	Kluyveromyces fragilis	PTGLVGLPAAFSPACSAHVPPVAVNVTKAWGEQLSTGAGNERSKRY
		49640454.emb	CAH02911.1	unnamed protein product	Kluyveromyces fragilis	PTGLVGLPAAFSPACSAHVPPVAVNVTKAWGEQLSTGAGNERSKRY
160	2.57E-18	17987739.ref	NP_540373.1	THIOL PEROXIDASE	Bruceella melitensis 16M	FAVPGAFTPTCSLHLPVAVNVVMGAWAQSTGEGKLGVRSKRY
		17983459.gb	AAL52637.1	THIOL PEROXIDASE	Bruceella melitensis 16M	FAVPGAFTPTCSLHLPVAVNVVMGAWAQSTGEGKLGVRSKRY
161	4.59E-19	90578646.ref	ZP_01234456.1	putative antioxidant	Vibrio angustum S14	DTAEFAVPGAFTPTCSEAHLPVCSVNMVNAWAQDQFGKRSWRY
		90439479.gb	EAS64660.1	putative antioxidant	Vibrio angustum S14	DTAEFAVPGAFTPTCSEAHLPVCSVNMVNAWAQDQFGKRSWRY
162	0	125848530.ref	XP_001342297.1	PRELICTED: hypothetical protein isoform 1	Danio rerio	FGVPGAFTPGCSKTHLPCVSNVNMVSAWGWKANNNGRTGRYGTLG
163	0	33151875.ref	NP_873228.1	putative peroxiredoxin/glutaredoxin family protein	Haemophilus ducreyi 35000HP	FSLPGAFTPTCSSTHLPVCSVNMVNAWAQDQNGEFGNRSWRY
		33148096.gb	AAP95617.1	putative peroxiredoxin/glutaredoxin family protein	Haemophilus ducreyi 35000HP	FSLPGAFTPTCSSTHLPVCSVNMVNAWAQDQNGEFGNRSWRY
164	4.94E-18	153838860.ref	ZP_01991527.1	redoxin domain protein	Vibrio parahaemolyticus AQ3810	FAVPGAFTPTCSEAHLPVAVNVVMNAWGEAQDQGGGVRVRSQRY
		149747688.gb	EDM58598.1	redoxin domain protein	Vibrio parahaemolyticus AQ3810	FAVPGAFTPTCSEAHLPVAVNVVMNAWGEAQDQGGGVRVRSQRY
165	8.97E-17	84515747.ref	ZP_01003108.1	AhpC/TSA family protein	Loktanella vestfoldensis SKA53	FGLPGAFTGCTTAHVPCVSNVNMKAWGESTFVNRSKRYGPGQ
		84510189.gb	EAO06645.1	AhpC/TSA family protein	Loktanella vestfoldensis SKA53	FGLPGAFTGCTTAHVPCVSNVNMKAWGESTFVNRSKRYGPGQ
166	4.56E-18	71082835.ref	YP_265554.1	peroxisomal membrane protein a (pmp20)	Candidatus Pelagibacter ubique	FGLPGAFTSVCSAKHLPCVSNVNMDSWGWKSQLGIRSNRYDAGA
		91762742.ref	ZP_01264707.1	peroxisomal membrane protein a (pmp20)	Candidatus Pelagibacter ubique	FGLPGAFTSVCSAKHLPCVSNVNMDSWGWKSQLGIRSNRYDAGA
		71061948.gb	AAZ20951.1	peroxisomal membrane protein a (pmp20)	Candidatus Pelagibacter ubique	FGLPGAFTSVCSAKHLPCVSNVNMDSWGWKSQLGIRSNRYDAGA
		91718544.gb	EAS85194.1	peroxisomal membrane protein a (pmp20)	Candidatus Pelagibacter ubique	FGLPGAFTSVCSAKHLPCVSNVNMDSWGWKSQLGIRSNRYDAGA
167	6.56E-14	83770679.dbj	BAE60812.1	unnamed protein product	Aspergillus oryzae	FSVPGAFPTCSVNHMPVAVVVMVSAWGWKANNNGRTGRYYTYA
169	2.33E-20	67643623.ref	ZP_00442388.1	COG0678: Peroxiredoxin	Burkholderia mallei G88 horse 4	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		83621161.ref	ZP_00931573.1	COG0678: Peroxiredoxin	Burkholderia mallei FMH	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		83625694.ref	ZP_00935924.1	COG0678: Peroxiredoxin	Burkholderia mallei JHU	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		100264082.ref	ZP_01338781.1	hypothetical protein Bmal2_03003480	Burkholderia mallei 2002721280	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		100917347.ref	ZP_01345825.1	hypothetical protein Bmal10_03001094	Burkholderia mallei 10399	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		147747056.gb	EDK54133.1	AhpC/TSA family protein	Burkholderia mallei FMH	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		147752045.gb	EDK59112.1	AhpC/TSA family protein	Burkholderia mallei JHU	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		148026709.gb	EDK84794.1	AhpC/TSA family protein	Burkholderia mallei 2002721280	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
		160694874.gb	EDP84882.1	AhpC/TSA family protein	Burkholderia mallei ATCC 10399	GNPAFGLPGAFTPTCSAQHVPVAVNVVMGAWGRDLMGIRSRRY
170	1.06E-21	160898550.ref	YP_001561432.1	Redoxin domain protein	Deflitis acidovorans SPH-1	FAVPGAFTPTCSAKHVPVAVNVVMGAWARDQLGIRSNRYGPGK
		160361434.gb	ABX33047.1	Redoxin domain protein	Deflitis acidovorans SPH-1	FAVPGAFTPTCSAKHVPVAVNVVMGAWARDQLGIRSNRYGPGK
171	3.57E-17	57339780.gb	AAW49877.1	hypothetical protein FTI0557	synthetic construct	FSLPGAFTPTCSTYQLPRFKELGIDEVLSVNGNVEFGKRSWRY
172	1.09E-17	3462877.gb	AAC34466.1	unknown	Rhizobium etli	FRTRVDFSLPGAFTPTCSFTQPLCLSVNMVNAWGSQSGE
173	1.55E-21	107021644.ref	YP_619971.1	Redoxin	Burkholderia cenocepacia AU_1054	FGLPGAFTPTCSAQHVPVAVNVVMGAWARDLMGIRSLRDGGV
		116688589.ref	YP_834212.1	Redoxin domain protein	Burkholderia cenocepacia H12424	FGLPGAFTPTCSAQHVPVAVNVVMGAWARDLMGIRSLRDGGV
		105891833.gb	ABF74998.1	Redoxin	Burkholderia cenocepacia AU_1054	FGLPGAFTPTCSAQHVPVAVNVVMGAWARDLMGIRSLRDGGV

174	1.27E-11	116646678.gb	ABK07319.1	Redoxin domain protein	Redoxin domain protein	Burkholderia cenocepacia H12424	VGAGGGQAGNKVNFVPGAFIPGCSKVRLLGNRRLKRFGTGL
175	1.86E-19	118072324.ref	XP_001164504.1 ZP_01540514.1	PREDICTED: peroxiredoxin 5 isoform 2	Redoxin	Pan troglodytes	FAVPGAFPTCSQSHPCLVSNVMKAWGDSQDTAGGGRSQRY
176	5.52E-19	118023202.gb	EAV37016.1	Redoxin	Redoxin	Shewanella woodyi ATCC 51908	GPNAFGLPGAFPTCSARHVPVCSVNVVMGAWARQMGIRSQRY
177	7.22E-09	121527984.ref	ZP_01660598.1	putative type 2 peroxiredoxin protein	putative type 2 peroxiredoxin protein	Shewanella woodyi ATCC 51908	VINLRSSDEGVFLPGAYTGVCSKSHKVPVAINVVAEKI
178	0	121304752.gb	EAX45716.1	peroxiredoxin IIF	peroxiredoxin IIF	Ralstonia pickettii 12J	FGVPGAFIPGCSKTHLPCVSNVMSAWGKEHGGVRSKRYGTGL
179	1.32E-14	118721272.emb	CAL69875.1	similar to Drosophila melanogaster CG7217	similar to Drosophila melanogaster CG7217	Pisum sativum	GDGFAVPGAYTPTCDSAHVPCVSCNVMAAWGESTLISRKRY
180	5.37E-23	38048721.gb	AAR10263.1	AlpC/TSA family protein	AlpC/TSA family protein	Drosophila yakuba	FSLPGAFTPTCSLQLPCVSNVNMNAWGKALGSGEFGMRSWRY
181	1.18E-20	83944231.ref	ZP_00956686.1	AhpC/TSA family protein	AhpC/TSA family protein	Sulfitobacter sp. EE-36	DTGEFAVPGAFPTCSAKHVPVCSVNVMTAWAESQLGVRSQRY
182	1.49E-15	83944775.gb	EAP82657.1	CONSERVED HYPOTHETICAL-PEROXIREDOXIN 2 FAMILY	CONSERVED HYPOTHETICAL-PEROXIREDOXIN 2 FAMILY	Mesorhizobium loti	FALPGAFTPTCSSNHLPLCLSVNVMNAEWGQHQGNGEFGQRSRRY
183	0	20804163.emb	CAD31366.1	Redoxin domain protein	Redoxin domain protein	Acidiphilium cryptum JF-5	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
184	0	148260898.ref	YP_001235025.1	Redoxin domain protein	Redoxin domain protein	Acidiphilium cryptum JF-5	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
185	9.12E-22	146402579.gb	ABQ31106.1	Glutaredoxin-like region	Glutaredoxin-like region	Chromohalobacter salexigenis DSM	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
186	0	92113381.ref	YB_573309.1	Glutaredoxin-like region	Glutaredoxin-like region	Chromohalobacter salexigenis DSM	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
187	6.96E-19	91796471.gb	ABE58610.1	Glutaredoxin-like region	Glutaredoxin-like region	Ralstonia eutropha JMP134	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
188	0	73593279.ref	YP_298646.1	Glutaredoxin-like region	Glutaredoxin-like region	Ralstonia eutropha JMP134	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
189	0	72121616.gb	AAZ63802.1	Glutaredoxin-like region	Glutaredoxin-like region	Ralstonia eutropha JMP134	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
190	0	54307493.ref	YP_128513.1	Putative peroxiredoxin/glutaredoxin family protein	Putative peroxiredoxin/glutaredoxin family protein	Photobacterium profundum SS9	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
191	0	46911913.emb	CAG18711.1	Putative peroxiredoxin/glutaredoxin family protein	Putative peroxiredoxin/glutaredoxin family protein	Photobacterium profundum SS9	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
192	0	115439131.ref	NP_001043845.1	Os01g0675100	Os01g0675100	Oryza sativa (japonica cultivar-group)	FGVPGAFPTCSNHQVPLVSNVMKAWAKSYGYTYTLGIRSRFF
193	0	75172153.sp	Q9FR35	PRX2C_ORYSJ Peroxiredoxin-2C (Peroxiredoxin IIC) (Thioredoxin reductase 2C)	PRX2C_ORYSJ Peroxiredoxin-2C (Peroxiredoxin IIC) (Thioredoxin reductase 2C)	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
194	0	11761654.gb	AAG40130.1	AF203879_1 peroxiredoxin	AF203879_1 peroxiredoxin	Oryza sativa	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
195	0	21644633.dbj	BAC01192.1	putative thioredoxin peroxidase	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
196	0	113533376.dbj	EAF05759.1	putative thioredoxin peroxidase	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
197	0	125527234.gb	EAY75346.1	hypothetical protein OsJ_003195	Os01g0675100	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
198	0	125571551.gb	EAZ13066.1	hypothetical protein OsJ_022891	hypothetical protein OsJ_022891	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
199	0	90580867.ref	ZP_01236669.1	Putative peroxiredoxin/glutaredoxin family protein	Putative peroxiredoxin/glutaredoxin family protein	Vibrio angustum S14	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
200	0	90437938.gb	EAS63127.1	Putative peroxiredoxin/glutaredoxin family protein	Putative peroxiredoxin/glutaredoxin family protein	Vibrio angustum S14	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
201	0	114569028.ref	NP_001058113.1	Os06g0625500	Os06g0625500	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
202	0	75119143.sp	Q89TY4	PR2E1_ORYSJ Peroxiredoxin-2E-1, chloroplast precursor	PR2E1_ORYSJ Peroxiredoxin-2E-1, chloroplast precursor	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
203	0	51091051.dbj	BAD35693.1	putative thioredoxin peroxidase 1	putative thioredoxin peroxidase 1	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
204	0	51535721.dbj	BAD3738.1	putative thioredoxin peroxidase 1	putative thioredoxin peroxidase 1	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
205	0	113596153.dbj	BAF20027.1	Os06g0625500	Os06g0625500	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
206	0	125556133.gb	EAZ01739.1	hypothetical protein OsL_022971	hypothetical protein OsL_022971	Oryza sativa (japonica cultivar-group)	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
207	0	156056134.ref	XP_001593991.1	peroxiredoxin	peroxiredoxin	Sclerotinia sclerotiorum 1980	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
208	0	154703203.gb	ED002942.1	peroxiredoxin	peroxiredoxin	Sclerotinia sclerotiorum 1980	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
209	0	86147320.ref	ZP_01065634.1	glutaredoxin	glutaredoxin	Vibrio sp. MED222	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
210	0	85834885.gb	EAG53029.1	glutaredoxin	glutaredoxin	Vibrio sp. MED222	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
211	0	119487340.ref	ZP_01621091.1	Glutaredoxin-like region protein	Glutaredoxin-like region protein	Lyngbya sp. PCC 8106	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
212	0	119455895.gb	EAW37030.1	Glutaredoxin-like region protein	Glutaredoxin-like region protein	Lyngbya sp. PCC 8106	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
213	0	158336812.ref	YP_001517986.1	peroxiredoxin, putative	peroxiredoxin, putative	Acarochloris marina MBIC11017	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
214	0	158307053.gb	ABW28670.1	peroxiredoxin, putative	peroxiredoxin, putative	Acarochloris marina MBIC11017	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
215	0	147065633.ref	ZP_01439464.1	THIOL PEROXIDASE	THIOL PEROXIDASE	Fulvmarina pelagi HTCC2506	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
216	0	114537955.gb	EAU41078.1	THIOL PEROXIDASE	THIOL PEROXIDASE	Fulvmarina pelagi HTCC2506	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
217	0	78706776.ref	NP_001027191.1	CG7217 CG7217-PB, isoform B	CG7217 CG7217-PB, isoform B	Drosophila melanogaster	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
218	0	78706776.ref	NP_6500679.3	CG7217 CG7217-PA, isoform A	CG7217 CG7217-PA, isoform A	Drosophila melanogaster	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
219	0	15292277.gb	AAK93407.1	LD45324p	LD45324p	Drosophila melanogaster	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
220	0	25012449.gb	AAAT1330.1	RE23139p	RE23139p	Drosophila melanogaster	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
221	0	28317021.gb	AAO39530.1	RE19605p	RE19605p	Drosophila melanogaster	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
222	0	28381340.gb	AAO41575.1	CG7217-PB, isoform B	CG7217-PB, isoform B	Drosophila melanogaster	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
223	0	71854599.gb	AAF55497.2	CG7217-PA, isoform A	CG7217-PA, isoform A	Drosophila melanogaster	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
224	0	21241904.ref	NP_641486.1	peroxiredoxin	peroxiredoxin	Xanthomonas axonopodis pv. citri str.	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
225	0	21107291.gb	AAAM36022.1	peroxiredoxin	peroxiredoxin	Xanthomonas axonopodis pv. citri str.	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
226	0	13872871.dbj	BAB43979.1	peroxisomal membrane protein 20	peroxisomal membrane protein 20	Candida boidinii	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
227	0	161869858.ref	YP_001599027.1	peroxiredoxin 2 family protein/glutaredoxin	peroxiredoxin 2 family protein/glutaredoxin	Neisseria meningitidis 053442	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
228	0	161595411.gb	ABX73071.1	peroxiredoxin 2 family protein/glutaredoxin	peroxiredoxin 2 family protein/glutaredoxin	Neisseria meningitidis 053442	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY
229	0	86748468.ref	YP_484964.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Rhodospseudomonas palustris HaA2	FSLPGAFTPTCSSHLLPCVSNVNMNAWKADQGNGEFGKRSWRY



198	0	86571496	gb	ABD06053.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Rhodopseudomonas palustris HaA2	FSLPGAFTPTCSSSHLPCVSVNVMNMAWKAQDQNGNFGPRSWRY
199	3.73E-21	77973000	ref	ZP_00828554.1	COG0678: Peroxiredoxin	Yersinia frederiksenii ATCC 33841	GPVEFAVPGAFPTCTSLNHLFPVSVNVMGAWAQSSLGVRSKRY
		15888122	ref	NP_353803.1	peroxiredoxin	Agrobacterium tumefaciens str. C58	
		15155756	gb	AAK86588.1	peroxiredoxin	Agrobacterium tumefaciens str. C58	
200	3.42E-16	94496864	ref	ZP_01303438.1	peroxiredoxin/glutaredoxin family protein	Spingomonas sp. SKA58	FSLPGAFTPTCSTEQCPVSVNVMYQWKGKQLFGERSWRYDAGE
		94423540	gb	EAT08567.1	peroxiredoxin/glutaredoxin family protein	Spingomonas sp. SKA58	
201	5.97E-18	12055937	ref	YP_961511.1	Redoxin domain protein	Shewanella sp. W3-18-1	GTLSFVPGAFPTCSEAHLPVAVNVMKAWGEAQGGIRSQR
		120557030	gb	ABM22957.1	Redoxin domain protein	Shewanella sp. W3-18-1	
202	0	85711542	ref	ZP_01042600.1	Peroxiredoxin_AhpC/Tsa family protein	Idiomarina baltica OS145	FAVPGAFPTCSEKHLPCVSVNVMKAWGDHLDGNGEGIRSKRY
		85694694	gb	EA032634.1	Peroxiredoxin_AhpC/Tsa family protein	Idiomarina baltica OS145	
203	1.67E-14	70985384	ref	XP_748198.1	allergen, putative	Aspergillus fumigatus Af293	FSVPGAFPTCSANHLPLVLSNVMMSAWGKANVTGDLSDPQARF
		66945826	gb	EAL86160.1	allergen, putative	Aspergillus fumigatus Af293	
205	0	156373030	ref	XP_001029337.1	predicted protein	Nematostella vectensis	FAVPGAFTPGCSKTHLPCIAVNVMSAWGEANGNIRSKRYGTGL
		156216335	gb	EDO37274.1	predicted protein	Nematostella vectensis	
206	0	42630851	ref	ZP_00156390.1	COG0678: Peroxiredoxin	Haemophilus influenzae R2866	FSLPGAFTPTCSSSHLPPVSVNVMNAWKEDEGNGEFGKRSWRY
		68249172	ref	YP_248284.1	peroxiredoxin/glutaredoxin	Haemophilus influenzae 86-028NP	
		145628955	ref	ZP_01784755.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae 22.1-21	
		14563748	ref	ZP_01787509.1	hypothetical protein CGSHI2421_05982	Haemophilus influenzae 22.4-21	
		145638519	ref	ZP_01794128.1	hypothetical protein CGSHill_07391	Haemophilus influenzae Pittii	
		145640548	ref	ZP_01796132.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae R3021	
		145642264	ref	ZP_01797829.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae R3021	
		68057371	gb	AAK87624.1	peroxiredoxin/glutaredoxin	Haemophilus influenzae 86-028NP	
		144979425	gb	EDJ89111.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae 22.1-21	
		144982609	gb	EDJ90155.1	hypothetical protein CGSHI2421_05982	Haemophilus influenzae R3021	
		14527114	gb	EDK12022.1	hypothetical protein CGSHill_07391	Haemophilus influenzae Pittii	
		145273020	gb	EDK12901.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae 22.4-21	
		145275134	gb	EDK14996.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae 22.4-21	
207	6.17E-17	119475977	ref	ZP_01616329.1	membrane protein	marine gamma proteobacterium	VFKTRVDELALPAGFTPTCSGTHLPCLSVNVGNGEFGDRSWRY
		119450604	gb	EAW31838.1	membrane protein	marine gamma proteobacterium	
208	4.49E-20	109896686	ref	YP_659941.1	Redoxin	Pseudoalteromonas atlantica T6c	FAVPGAFPTCSNTHLPCLSVNVMEAWGKSQDTGTGGLRSRGY
		109898967	gb	ABG38887.1	Redoxin	Pseudoalteromonas atlantica T6c	
209	0	91080447	ref	XP_969254.1	PREDICTED: similar to CG7217-PB, isoform B	Tribolium castaneum	FAVPGAFTPGCSKTHLPCVSVNVMMAWKAQDQGGTRSKRYGTGL
210	3.19E-13	154280557	ref	XP_001641091.1	hypothetical protein HCAG_03188	Ajielomyces capsulatus NAm1	FAVPGAFTPCSASHLPVAVLMSAWGKANVTGNMIGRTARY
		150411270	gb	EDN06658.1	hypothetical protein HCAG_03188	Ajielomyces capsulatus NAm1	
211	0	46015018	pdb	1OC3	A Chain A, Human Peroxiredoxin 5	Homo sapiens	FGVPGAFTPGCSKTHLPCLSVNVTVGEWGRAHGNRRLKRFGTGL
		46015019	pdb	1OC3	B Chain B, Human Peroxiredoxin 5	Homo sapiens	
		46015020	pdb	1OC3	C Chain C, Human Peroxiredoxin 5	Homo sapiens	
212	3.94E-14	83950502	ref	ZP_00959235.1	AhpC/TSA family protein	Roseovanius nubinihibens ISM	GPEQFALPGAFTGVCNHAHVPCISVNVVMGAWGESTLIDRSKRY
		83838401	gb	EAP77697.1	AhpC/TSA family protein	Roseovanius nubinihibens ISM	
213	0	126208946	ref	YP_001054171.1	hybrid peroxiredoxin HyPrx5	Actinobacillus pleuropneumoniae L20	FSLPGAFTPTCSSTHLPCMSVNVNMAWKAQDQNGEFGKRSWRY
		126097738	gb	ABN74566.1	hybrid peroxiredoxin HyPrx5	Actinobacillus pleuropneumoniae L20	
214	0	77961064	ref	ZP_00824912.1	COG0678: Peroxiredoxin	Yersinia mollaretii ATCC 43969	FSLPGAFTPTCSSSHLPCVSVNVMNMAWKAQDQNGEFGPRSWRY
215	7.93E-18	124548023	ref	ZP_01706805.1	Redoxin	Shewanella putrefaciens 200	GTLSFVPGAFPTCSEAHLPVAVNVMKAWGEAQGGIRSQR
		146294930	ref	YP_001185354.1	Redoxin domain protein	Shewanella putrefaciens CN-32	
		124508722	gb	EAY52812.1	Redoxin	Shewanella putrefaciens 200	
		145666620	gb	ABP77555.1	Redoxin domain protein	Shewanella putrefaciens CN-32	
216	1.01E-20	126450084	ref	YP_001082756.1	AhpC/TSA family protein	Burkholderia mallei NCTC 10247	GPGMFGLPGAFTPTCSAQHPVAVNVMGAWGRDLMGIRSRRY
		126242954	gb	ABO06047.1	AhpC/TSA family protein	Burkholderia mallei NCTC 10247	
217	4.20E-17	79320786	ref	NP_001031239.1	TPX1 (THIOREDOXIN-DEPENDENT PEROXIDASE 1); an	Arabidopsis thaliana	DGTISFFDFGVPGAFPTCSMKHVPVGVDFCFVSNVMKAWGKTY
218	3.17E-22	15218877	ref	NP_176773.1	TPX1 (THIOREDOXIN-DEPENDENT PEROXIDASE 1); an	Arabidopsis thaliana	FGVPGAFPTCSMKHVPVGVDFCFVSNVMKAWGKTYGSGELGVRSRFF
		7538536	sp	Q9XEX2	PRX2B_ARATH Peroxiredoxin-2B (Peroxiredoxin IIb) (Thior	Arabidopsis thaliana	
		4704730	gb	AAD28242.1	AF121355.1 peroxiredoxin TPx1	Arabidopsis thaliana	
		6227022	gb	AAF06058.1	AC009513_14 identical to gb:AF121355 peroxiredoxin TPx1	Arabidopsis thaliana	
		12083336	gb	AAG48827.1	AF332464.1 putative type 2 peroxiredoxin protein	Arabidopsis thaliana	
		18086474	gb	AAL57690.1	AT1965980/F12P19_14	Arabidopsis thaliana	
219	2.09E-16	110832905	ref	YP_691764.1	AhpC/TSA family protein	Alcanivorax borkumensis SK2	FAVPGAFTPGCSNTHMPCMAVNVVMGAWKQDQATGGMGIRSKRF
		110846016	emb	CAL15492.1	AhpC/TSA family protein	Alcanivorax borkumensis SK2	

220	0	125620178.gb	ABN46981.1	thioredoxin-dependent peroxidase	Nelumbo nucifera	GTLSEGVPGAFPTCSLKHVPLISVNMVMAWAKTYLGTISRFR
221	0	38488593.dbj	BAD02311.1	peroxiredoxin like protein	Actinobacillus actinomycesetemcomitans	FSLPGAFPTCSSSHLPVSVNMVMAWKEDEGNGEFGKRSWRY
222	2.83E-17	146279039.ref	YP_001169198.1	Redoxin domain protein	Rhodobacter sphaeroides ATCC 17025	FAVPGAYPTCHSAHVPGVEECISVNMVMAWGESLIGRSKRY
223	0	145557280.gb	ABF71893.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Rhodobacter sphaeroides ATCC 17025	FSLPGAFPTCSSSHLPVSVNMVMAWAKADQFGKRSWRYGWE
224	8.71E-21	145961934.gb	EDK27224.1	glutaredoxin	Vibronales bacterium SWAT-3	FSLPGAFPTCSSSHLPVSVNMVMAWAKADQFGKRSWRYGWE
225	2.04E-10	85707092.gb	EAQ25831.1	AhpC/TSA family protein	Roseovanius sp. 217	FAVPGAYPTCSSAHVPCISVNMVMAWGEATLLGRSKRYGTCE
226	1.14E-19	21492746.ref	NP_659821.1	putative hydroperoxide reductase protein	Roseovanius sp. 217	FAVPGAYPTCSSAHVPCISVNMVMAWGEATLLGRSKRYGTCE
227	1.68E-15	149927139.ref	ZP_01915396.1	probable type 2 peroxiredoxin protein	Limnobacter sp. MED105	LALPGAYPTCSAKHVPVAVNMVMAWKSIMVGRSNRYAPGV
228	1.19E-18	62289459.ref	YP_221252.1	ahpC/TSA family protein	Limnobacter sp. MED105	LALPGAYPTCSAKHVPVAVNMVMAWKSIMVGRSNRYAPGV
229	0	66360171.pdb	1TP9	A Chain A, Prx D (Type I) From Populus Tremula	Brucella abortus biovar 1 str. 9-941	FAVPGAFPTCSLHLPVAVNMVMAWQAQSTGEGKLGVRSKRY
230	4.86E-09	125525315.gb	EAY73429.1	hypothetical protein OsL_001276	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
231	9.88E-18	83946316.ref	ZP_00957684.1	AhpC/TSA family protein	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
232	0	59712907.ref	YP_205683.1	glutaredoxin	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
233	2.68E-18	162897468.gb	EDQ83804.1	predicted protein	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
234	0	162897467.gb	EDQ83803.1	predicted protein	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
235	7.12E-15	119472653.ref	XP_001258393.1	AhpC/TSA family protein	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
236	0	119408545.gb	EAW16496.1	AhpC/TSA family protein	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
237	1.02E-20	21593881.gb	AAM65848.1	type 2 peroxiredoxin, putative	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
238	1.08E-12	33863456.ref	NP_895016.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
239	0	165976910.ref	YP_001652503.1	hybrid peroxiredoxin hyPrx5	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
240	8.36E-13	68471468.ref	XP_720282.1	putative alkyl hydroperoxide reductase	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
241	0	46442382.gb	EAL01434.1	potential alkyl hydroperoxide reductase	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
242	8.80E-11	71143981.gb	AZ24454.1	peroxiredoxin/glutaredoxin family protein	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
243	0	149189165.ref	ZP_01867452.1	peroxiredoxin family protein/glutaredoxin	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
244	7.31E-19	125597912.gb	EAZ37692.1	hypothetical protein OsJ_021175	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
245	1.66E-19	127514569.ref	YP_001095766.1	Redoxin domain protein	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
246	0	148825149.ref	YP_001289902.1	hypothetical protein CGSHIEE_00105	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY
247	6.71E-10	149235590.ref	XP_001623673.1	hypothetical protein LELG_05089	Populus tremula	FGVPGAFPTCSLKHVPCISVNMVMAWAKADQGNGEFGKRSWRY

248	7.15E-21	146452652.gb	EDK46908.1	hypothetical protein LEI_G.05089	Lodderomyces elongisporus NRRL YB-	FSLPGAFTPTCSTYQLPCLSVNVMNAWGWKSGSGGEFGMRSWRY
		15986220.ref	NP_386573.1	hypothetical protein SMC01834	Sinorhizobium meliloti 1021	
		15076490.emb	CAC47046.1	CONSERVED HYPOTHETICAL PROTEIN	Sinorhizobium meliloti	
249	0	12844914.dbj	BAB26548.1	unnamed protein product	Mus musculus	FGVPGAFTPGCKYKTHLPCLSVNVIEEWGRAHGNRRLKRFGTGL
250	9.83E-10	50427407.ref	XP_462316.1	hypothetical protein DEHA0G19030g	Debaryomyces hansenii CBS767	TAAPGAFPTCTEEHIPVVTANVAAWGWKALLGIRTARYGLGF
		49657986.emb	CAG90822.1	unnamed protein product	Debaryomyces hansenii CBS767	
251	0	91227291.ref	ZP_01267176.1	peroxiredoxin family protein/glutaredoxin	Vibrio alginolyticus 12G01	FSLPGAFTPTCSSSHLPCVSNVNMNAWVKDQDQNGEFGKRSWRY
		91189685.gb	EAS74974.1	peroxiredoxin family protein/glutaredoxin	Vibrio alginolyticus 12G01	
252	1.07E-22	49474607.ref	YP_032643.1	hypothetical protein BQ10800	Bartonella quintana str. Toulouse	FSLPGAFTPTCSTQLPCLSVNVMNAWKEAQFGMRSWRYDPYE
		49240105.emb	CAF26547.1	hypothetical protein	Bartonella quintana str. Toulouse	
253	6.56E-18	69935890.ref	ZP_00630777.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Paracoccus denitrificans PD1222	FSLPGAFTPTCSTYQLPCMSVNMVNAWAKAQFGARSWRYDPYG
		119384118.ref	YP_915174.1	Redoxin domain protein	Paracoccus denitrificans PD1222	
		119373885.gb	ABL69478.1	Redoxin domain protein	Paracoccus denitrificans PD1222	
254	7.54E-16	157093003.gb	ABV22156.1	peroxiredoxin V protein	Perkinsus chesapeakei	FGVPGAFPTCDQTHLPCMAVNMVAWGWKASDITAKGNVRCKRF
255	4.76E-22	118481397.gb	ABK92641.1	unknown	Populus trichocarpa	SEGEFAVPGAFPTCSQKHLPCISVNMNAWKAEDLLGVRSRRY
256	2.54E-20	114766813.ref	ZP_01445747.1	AhpC/TSA family protein	Roseovarius sp. HTCC2601	FAVPGAFPTCHSAHVPCVSNVMNAWGEATLIARSKRYSPGE
		114541007.gb	EAU44065.1	AhpC/TSA family protein	Roseovarius sp. HTCC2601	
257	1.99E-21	84356655.ref	ZP_00981494.1	COG0678; Peroxiredoxin	Burkholderia cenocepacia PC184	FGLPGAFTPTCSAQHVPCVSNVMGAWGRDLMGIRSLRYDGGV
258	3.27E-10	157336429.emb	CAQ71114.1	unnamed protein product	Vitis vinifera	DEGVPLKELFKDKFGLPGLGAYTGVCSAQHPCVA/VNLGPRSHRW
259	1.07E-11	111063934.gb	EAT85054.1	hypothetical protein SNOG_07588	Phaeosphaeria nodorum SN15	ACGRPQEVFVPGAFTPGQAFHLPKGVVNMNAWGWKNEVSVS
		0	74220848.dbj	unnamed protein product	Mus musculus	FGVPGAFTPGCKYKTHLPCLSVNVIEEWGRAHGNRRLKRFGTGL
261	4.50E-20	126729190.ref	ZP_01745004.1	antioxidant, AhpC/Tsa family protein	Sagittula stellata E-37	FSLPGAFTPTCSTYQLPCLSVNVMNAWAKAGSGEGFARSWRY
		126710180.gb	EBA09232.1	antioxidant, AhpC/Tsa family protein	Sagittula stellata E-37	
262	1.50E-11	19075206.ref	NP_587706.1	thioredoxin peroxidase	Schizosaccharomyces pombe 972h-	VGVPGAFPTPCSSQVPGVVAVNVTKAWKSFDAQFGLPSKRY
		13432214.sp	O14313	PMP20_SCHPO Putative peroxiredoxin pmp20 (Thioredoxin reductase)	Schizosaccharomyces pombe 972h-	
		3646447.emb	CAA20911.1	thioredoxin peroxidase	Schizosaccharomyces pombe	
263	0	118054077.ref	ZP_01522618.1	Redoxin	Comamonas testosteroni KF-1	FAVPGAFPTCSEKHLPCLSVNMGAWGRDQATGLLGLRANRF
		117998499.gb	EAV12662.1	Redoxin	Comamonas testosteroni KF-1	
264	1.49E-10	45187719.ref	NP_983942.1	ADL154Cp	Asbya gossypii ATCC 10895	IPGLVGPAAFPSPACSSSHVPTCVNVTKAWAESLGNDRSVRY
		44982480.gb	AA551766.1	ADL154Cp	Asbya gossypii ATCC 10895	
265	7.60E-21	134095964.ref	YP_001101039.1	Putative alkyl hydroperoxide reductase. Putative member of	Herminimonas arsenicoxydans	FAVPGAFPTCSETHAPGVDECISVNMGAWGRDQLGVRSQRY
		133739867.emb	CAL62918.1	Putative alkyl hydroperoxide reductase. Putative member of	Herminimonas arsenicoxydans	
266	1.55E-19	114561403.ref	YP_748916.1	Redoxin domain protein	Shewanella frigidimarina NCIMB 400	ATGQFAVPGAFPTCSEAHLPVCSVNMNAWKAWEAQQGVRSQRY
		114332696.gb	ABI70078.1	Redoxin domain protein	Shewanella frigidimarina NCIMB 400	
267	4.89E-20	121591226.ref	ZP_01678527.1	antioxidant, putative	Vibrio cholerae 2740-80	FAVPGAFPTCSEAHLPVCSVNMNAWKAWEAQTGNGGVRSQRY
		121728765.ref	ZP_01681779.1	antioxidant, putative	Vibrio cholerae V52	
		147674520.ref	YP_001216912.1	putative antioxidant	Vibrio cholerae O395	
		153222074.ref	ZP_01952884.1	antioxidant, putative	Vibrio cholerae MAK 757	
		153818367.ref	ZP_01971034.1	antioxidant, putative	Vibrio cholerae NCTC 8457	
		121546924.gb	EAX57075.1	antioxidant, putative	Vibrio cholerae V52	
		121628942.gb	EAX61395.1	antioxidant, putative	Vibrio cholerae V52	
		124119171.gb	EAY37914.1	antioxidant, putative	Vibrio cholerae MAK 757	
		126511114.gb	EAZ73708.1	antioxidant, putative	Vibrio cholerae NCTC 8457	
		146316403.gb	ABO20942.1	putative antioxidant	Vibrio cholerae O395	
268	1.22E-20	124385055.ref	YP_001027307.1	AhpC/TSA family protein	Burkholderia mallei NCTC 10229	GPGMFLPGAFTPTCSAQHVPCVAVNMGAWGRDLMLGIRSRRY
		124293075.gb	ABN02344.1	AhpC/TSA family protein	Burkholderia mallei NCTC 10229	
269	2.37E-15	56898554.ref	YP_168890.1	antioxidant, AhpC/Tsa family	Silicibacter pomeroyi DSS-3	GPETFGLPGAFTRCGSMTHLPCVSNVMTAWGQSLYDRQRFF
		56880291.gb	AAV96957.1	antioxidant, AhpC/Tsa family	Silicibacter pomeroyi DSS-3	
270	0	126346087.ref	XP_001373469.1	PREDICTED: similar to hCG2016877., partial	Monodelphis domestica	FGVPGAFTPGCKYKTHLPCLSVNVSEWGLSGGNRRLKRFGTGL
271	0	163858651.ref	YP_001631149.1	putative glutaredoxin	Bordetella petrii	FSLPGAFTPTCSSTHLPCVSNVMNEWAKDQFGKRSWRYDPFE
		163260579.emb	CAP42881.1	putative glutaredoxin	Bordetella petrii	
272	6.84E-15	83953272.ref	ZP_00961994.1	AhpC/TSA family protein	Sulfitobacter sp. NAS-14.1	GPDGFVPGAYTPTCDSAHVPCVSNVMAAWGKSTLISRSKRY
		83842240.gb	EAP81408.1	AhpC/TSA family protein	Sulfitobacter sp. NAS-14.1	
273	0	9449369.ref	ZP_01302946.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Sphingomonas sp. SKA58	FSVPGAFPTCSAKHLPCAVNMGAWGWKALSALGTRGQRFQVWE
		94424115.gb	EAT09139.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Sphingomonas sp. SKA58	
274	4.03E-20	150423309.gb	EDN15254.1	antioxidant, putative	Vibrio cholerae AM-19226	FAVPGAFPTCSEAHLPVCSVNMNAWKAWEAQTGNGGVRSQRY
275	0	162449175.ref	YP_001611542.1	putative peroxiredoxin 2 family protein/glutaredoxin	Sorangium cellulosum 'So ce 56'	FALPGAFTPTCSSSHVPCVSNVMNMEWCKAQNQNGEFGKRSWRY
		161159757.emb	CAN91062.1	putative peroxiredoxin 2 family protein/glutaredoxin	Sorangium cellulosum 'So ce 56'	

276	2.79E-11	130361.11	P14293	PMPB_CANBO Putative peroxiredoxin-B (Thioredoxin reduc	Candida boidinii	EGGEVSPGAFPTPCTEQHLPVITQNLVKGWKKELLGTRSGRL
		170901.gb	AAA34358.1	peroxisomal membrane protein (PMP20B)	Candida boidinii	
277	1.34E-20	148548262.ref	YP_001268364.1	Redoxin domain protein	Pseudomonas putida F1	FALPGAFTPTCSERHVPVCSVNMVNAWGNMNGELGRRSQRY
		148512320.gb	ABQ79180.1	Redoxin domain protein	Pseudomonas putida F1	
278	7.61E-20	89902545.ref	YP_525016.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ MR	Rhodoferrax ferriduocens T118	FALPGAFTPTCSAKHVPVCSVNMVNAWGAWARDGATGLMGLRSNRY
		89347282.gb	ABD71488.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ MR	Rhodoferrax ferriduocens T118	
279	3.90E-17	156052168.ref	XP_001592045.1	hypothetical protein SS1G_07492	Sclerotinia sclerotiorum 1980	GEESIGVPAAFSPTCSDSHVPVSVNMVNAWGSLSLGTNRSKRY
		154705269.gb	EDC05008.1	hypothetical protein SS1G_07492	Sclerotinia sclerotiorum 1980	
280	9.73E-15	67902186.ref	XP_681349.1	hypothetical protein AN8080.2	Aspergillus nidulans FGSC A4	DKGEFSVPGAFTPTCSVNHLPNLPELKKKVVASVMSAWGKAN
		40740512.gb	EAA59702.1	hypothetical protein AN8080.2	Aspergillus nidulans FGSC A4	
281	0	116190632.ref	ZP_01480369.1	hypothetical protein VchoM_02000393	Vibrio cholerae MO10	FSLPGAFTPTCSSHLPCVSVNMVNAWKDDQNGNGEFGKRSWRY
		116216129.ref	ZP_01482017.1	hypothetical protein VchoR_02002080	Vibrio cholerae RC385	
		116219574.ref	ZP_01485052.1	hypothetical protein VchoV5_02002351	Vibrio cholerae V51	
282	0	152397888.ref	YP_001342723.1	Peroxioredoxin	Mainomonas sp. MWYL1	FSLPGAFTPTCSTSHLPCVSVNMFQWGSQFQMRSWRYDPFE
		150838812.gb	ABR72788.1	Peroxioredoxin	Mainomonas sp. MWYL1	
283	3.02E-15	126274152.ref	XP_001387857.1	putative thioredoxin peroxidase	Pichia stipitis CBS 6054	IGVPGAFFSPACSSSHVPVAVNVTKAWGDALGNERSRRYGTVT
		126213727.gb	EAZ63834.1	putative thioredoxin peroxidase	Pichia stipitis CBS 6054	
284	0	89075200.ref	YP_01161631.1	Putative peroxiredoxin/glutaredoxin family protein	Photobacterium sp. SKA34	FSLPGAFTPTCSSHLPCVSVNMVNAWKADQNGNGEFGARSWRY
		89049022.gb	EAR54589.1	Putative peroxiredoxin/glutaredoxin family protein	Photobacterium sp. SKA34	
285	3.16E-20	77361565.ref	YP_341140.1	Peroxioredoxin, AhpC/Tsa	Pseudoalteromonas haloplanktis	FAVPGAFTPTCSNAHLPCVSVNMVNAWKASQGGVRSKRYVTGL
		76876476.emb	CAI87698.1	Peroxioredoxin, AhpC/Tsa family	Pseudoalteromonas haloplanktis	
286	6.74E-14	85092101.ref	XP_959227.1	hypothetical protein NCU06880	Neurospora crassa OR74A	IGVPAAFSPACSSASHIPVSVNMVNAWKVKNENLGNDRSKRYGTAV
		28320630.gb	EAA23991.1	predicted protein	Neurospora crassa OR74A	
287	1.17E-12	121700080.ref	XP_001268305.1	AhpC/TSA family protein	Aspergillus clavatus NRRL 1	VPGLVGPAAAFSPACSSSHVPVSVNVTKAWGVSLGNHRGKRY
		119396447.gb	EAW06879.1	AhpC/TSA family protein	Aspergillus clavatus NRRL 1	
288	0	88858154.ref	ZP_01132796.1	putative peroxiredoxin/glutaredoxin family protein	Pseudoalteromonas tunicata D2	FSLPGAFTPTCSSHLPCVSVNMVNAWKDFGKRSWRYDPFE
		88819771.gb	EAR29584.1	putative peroxiredoxin/glutaredoxin family protein	Pseudoalteromonas tunicata D2	
289	0	77164827.ref	YP_343352.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrosococcus oceanii ATCC 19707	FSLPGAFTPTCSSNHLPCVSVNMFQWSRHMGNGEFGMRAWRY
		76883141.gb	ABA57822.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Nitrosococcus oceanii ATCC 19707	
290	2.76E-21	161525999.ref	YP_001581011.1	Redoxin domain protein	Burkholderia multivorans ATCC 17616	GNPAFGLPGAFTPTCSAGHVPVSVNMVNAWGAWRDLMGIRSLRY
		160343428.gb	ABX16514.1	Redoxin domain protein	Burkholderia multivorans ATCC 17616	
291	3.57E-13	156843417.ref	XP_001644776.1	hypothetical protein KpoI_1020p26	Vanderwaltozyma polyspora DSM	DIGEIGLPAAFSPACSSSHVPVTVNVTKAWSESLGNERSMRY
		156115426.gb	EDQ16918.1	hypothetical protein KpoI_1020p26	Vanderwaltozyma polyspora DSM	
292	1.35E-16	162890664.gb	EDQ77030.1	predicted protein	Physcomitrella patens subsp. patens	GOGLFGLPGAFTVGSQKHVPVSVNTMNAWAEKLLGPRSQRY
293	2.05E-20	53728049.ref	YP_104087.1	AhpC/TSA family protein	Burkholderia mallei ATCC 23344	GPMMFGLPGAFTPTCSAGHVPVAVNMVNAWGAWRDLMGIRSRRY
		121598876.ref	YP_991814.1	AhpC/TSA family protein	Burkholderia mallei SAVP1	
		52429472.gb	AAU50065.1	AhpC/TSA family protein	Burkholderia mallei ATCC 23344	
		121227686.gb	ABM50204.1	AhpC/TSA family protein	Burkholderia mallei SAVP1	
294	2.14E-13	89070937.ref	ZP_01158166.1	AhpC/TSA family protein	Oceanicola granulosus HTCC2516	DLGAFGLPGAFTGCTSAHVPTAVNMVNAWGVGSESTFYGRSKRY
		89043487.gb	EAR49700.1	AhpC/TSA family protein	Oceanicola granulosus HTCC2516	
295	4.00E-21	85373834.ref	YP_457896.1	AhpC/TSA family protein	Erythrobacter litoralis HTCC2594	FAVPGAFTPTCSAKHLPVTSVNMVNAWGAQKADNGELGTRSQRY
		84786917.gb	ABC63099.1	AhpC/TSA family protein	Erythrobacter litoralis HTCC2594	
296	2.83E-18	150395754.ref	YP_001326221.1	Redoxin domain protein	Sinorhizobium medicae WSM419	GPVEFAVPGAFTPTCSLNLHLPVAVNMVNAWGAWATHSLGIRSKRY
		150027269.gb	ABR59386.1	Redoxin domain protein	Sinorhizobium medicae WSM419	
297	0	114321611.ref	YP_743294.1	Glutaredoxin-family domain protein	Alkaliimnocola ehrlichei MLHE-1	FSLPGAFTPTCSSHLPCVSVNMVNAWGAWRDLMGIRSRRY
		114228005.gb	ABL57804.1	Glutaredoxin-family domain protein	Alkaliimnocola ehrlichei MLHE-1	
298	8.35E-18	116781285.gb	ABK22037.1	unknown	Picea sitchensis	VPGLAVPGAFTPTCSQKHLPCVSVNMVNAWGENLLGVRSRRY
299	9.32E-13	70384685.ref	XP_747849.1	allergen Asp F3	Aspergillus fumigatus A1293	DKGEFALPGAFTPVCSARHVPVAVLVMSAWGKANEELGTRKRY
		3914384.gb	O43099	PMP20_ASPFU Putative peroxiredoxin pmp20 (Thioredoxin	Aspergillus fumigatus	
		2769700.gb	AA895638.1	peroxisomal-like protein	Aspergillus fumigatus	
		66845476.gb	EAL85811.1	allergen Asp F3	Aspergillus fumigatus A1293	
300	2.51E-09	39970487.ref	XP_366634.1	hypothetical protein MGG_02710	Magnaporthe grisea 70-15	ALKVGPTEGGVSPGAFPTCQEQHLKVMVSAWGAQKANDSGRTARY
		149209947.ref	XP_001522348.1	hypothetical protein MGCH7_ch7g455	Magnaporthe grisea 70-15	
		86196410.gb	EAG71048.1	hypothetical protein MGCH7_ch7g455	Magnaporthe grisea 70-15	
		145017484.gb	EDK01847.1	hypothetical protein MGG_02710	Magnaporthe grisea 70-15	
301	0	51261175.gb	AAH78771.1	Peroxioredoxin 5	Rattus norvegicus	FGVPGAFTPGCSKTHLPCVSVNVAEWGRAHGNRRLLKRFGTGL
		149062198.gb	EDM12621.1	peroxiredoxin 5, isoform CRA_c	Rattus norvegicus	

302	0	157342785	emb	CAO65497.1	unnamed protein product	<i>Vitis vinifera</i>	GTLAFGVPGAFPTCSVKHVPVSVNVMKAWAKTYLGTTRSRF
303	0	74354725	gb	AAI03074.1	PRDX5 protein	<i>Bos taurus</i>	FGLPGAFPGCSKTHLPCLTVNVTTEWARAHGNHRLKRFGTGL
304	1.28E-18	159042669	ref	YP_001631463.1	Redoxin domain protein	<i>Dinoroseobacter shibae</i> DFL 12	FAVPGAYPTCHSAHVPCSVNVMKAWGEATDPPGSLHARSKRY
305	3.86E-15	157910429	gb	ABV91862.1	Redoxin domain protein	<i>Dinoroseobacter shibae</i> DFL 12	FALPGAFTPACSDRHLPCLSVNVMHQWATSRGNEMGLRSWRY
306	7.31E-23	85704849	ref	ZP_01035950.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Roseovarius</i> sp. 217	DTHEISLPGAFPTCSLKHVPCISVNVKMSWANTFLGIRSKRF
307	8.58E-18	85670667	gb	EAQ25527.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Roseovarius</i> sp. 217	GTLTFAPVPGAFPTCSAKHLPCLVAVNVMGAWGRDQMGVRSQRY
308	1.43E-20	70914307	ref	XP_731797.1	hypothetical protein PC301962.00.0	<i>Pleurocystis pacifica</i> SIR-1	GLGEFSPVPGAYPTCSKEHLPCLSVNVMQAWGSEHLGVRGKRF
309	0	66502037	emb	CAH86350.1	hypothetical protein PC301962.00.0	<i>Pleurocystis pacifica</i> SIR-1	FSLPGAFTPTCSSTHLPCLSVNVMNERAKDQNGEGFKRSWRY
310	0	99078567	ref	YP_611825.1	Redoxin	<i>Bordetella pertussis</i> Tohama I	GTLAFGVPGAFPTCSLKHVPCISVNVKMSWANTFLGIRSKRF
311	0	99035705	gb	ABF62563.1	Redoxin	<i>Bordetella pertussis</i> Tohama I	GTLTFAPVPGAFPTCSAKHLPCLVAVNVMGAWGRDQMGVRSQRY
312	9.19E-11	163808133	ref	ZP_02199853.1	putative thioredoxin family protein	<i>Arachis hypogaea</i>	GPDGVGVPVPGAFPTACHRNHLPVTSVNVLNAWQQSLGPRSQRY
313	0	157407885	gb	ED073885.1	putative thioredoxin family protein	<i>Methylobacterium populi</i> BJ001	FSPVPGAFPTCSAKHLPCLVAVNVMGAWSKSAMGKRGORFAPGE
314	1.69E-09	499232398	ref	ZP_01911707.1	putative thioredoxin family protein	<i>Methylobacterium populi</i> BJ001	VAIPGAFPTCTANHIPVLSANVQSFAFGKALDPPGAFGTRTRARY
315	3.60E-12	149315838	gb	EDM75359.1	putative glutaredoxin	<i>SpHINGOPYXIS alaskensis</i> RB2256	EQGEFALPGAFPTCYCSARHPVAVLVMSAWGKANEETRTRY
316	7.82E-19	33592799	ref	NP_880443.1	putative glutaredoxin	<i>Lipomyces kononenkoae</i>	FAVPGAFPTCHSAHVPCISGNVMKAWGEATLIGRSKRYGTCE
317	9.70E-12	33572447	emb	CAE42015.1	thioredoxin fold	<i>Aspergillus clavatus</i> NRRL 1	VGVPAAFGTCSKSHIPVSVNVMKAWSDQLPTGEGGMGRKRY
318	0	115187464	gb	ABI84254.1	thioredoxin fold	<i>Aspergillus clavatus</i> NRRL 1	FAVPGAFPTCSAKHLPCLVAVNVMQAWGRSQMLGRLSRREYEPGE
319	2.26E-21	115421919	emb	CAJ48439.1	putative antioxidant	<i>Silicobacter</i> sp. TM1040	FSLPGAFTPTCSTYQLPCISVNVMAWAKAQSGSGEFGMRSWRY
320	8.02E-14	163808133	ref	ZP_02199853.1	Redoxin domain protein	<i>Silicobacter</i> sp. TM1040	DDGVFAVPGAYTGTCHKQLPIVSVNVMINTWKRDRTLIGRSKRY
321	0	103485662	ref	YP_615223.1	Redoxin domain protein	<i>Gibberella zeae</i> PH-1	TVGFEFVPGAFPTGCSKTHLPCLVAVNVMGAWKAAQGGKRSKRY
322	0	66789502	ref	YP_244264.1	peroxiredoxin	<i>Xanthomonas campestris</i> pv.	FAVPGAFPTGCSKTHLPCLVAVNVMGAWKAAQGGKRSKRY
323	1.33E-17	21230504	ref	NP_636421.1	peroxiredoxin	<i>Xanthomonas campestris</i> pv.	FSLPGAFTPTCSTYQLPCISVNVMAWAKAQSGSGEFGARSWRY
324	4.41E-18	21230504	ref	NP_636421.1	peroxiredoxin	<i>Xanthomonas campestris</i> pv.	FAVPGAFPTCSEAHLPCLVAVNVMKAWGEAQDTAGGGVRSQRY
325	5.24E-19	66789502	ref	YP_244264.1	peroxiredoxin	<i>Xanthomonas campestris</i> pv.	
326	0	66574834	gb	AAV50244.1	peroxiredoxin	<i>Xanthomonas campestris</i> pv.	
327	0	118437202	ref	ZP_01547633.1	hypothetical protein SIAM614_11968	<i>Stappia aggregata</i> IAM 12614	
328	2.42E-17	118437202	ref	ZP_01547633.1	hypothetical protein SIAM614_11968	<i>Stappia aggregata</i> IAM 12614	
329	1.10E-18	92119187	ref	YP_578916.1	alkyl hydroperoxide reductase/thiol specific antioxidant/Mal	<i>Nitrobacter hamburgensis</i> X14	
330	5.02E-21	91802081	gb	ABE64456.1	alkyl hydroperoxide reductase/thiol specific antioxidant/Mal	<i>Nitrobacter hamburgensis</i> X14	
331	1.60E-20	110756016	ref	XP_624806.2	PREDICTED: similar to CG7217-PB, isoform B	<i>Apis mellifera</i>	
332	0	20269863	gb	AAM18076.1	antioxidant, AhpC/Tsa family protein	<i>Branchiostoma belcheri</i> tsingtaunense	
333	0	126737672	ref	ZP_01753402.1	antioxidant, AhpC/Tsa family protein	<i>Roseobacter</i> sp. SK209-2-6	
334	0	126721065	gb	EBA17769.1	antioxidant, AhpC/Tsa family protein	<i>Roseobacter</i> sp. SK209-2-6	
335	0	149115275	ref	ZP_01842020.1	Redoxin domain protein	<i>Shewanella baltica</i> OS223	
336	0	153002707	ref	YP_001368388.1	Redoxin domain protein	<i>Shewanella baltica</i> OS185	
337	0	160877443	ref	YP_001656759.1	Redoxin domain protein	<i>Shewanella baltica</i> OS195	
338	0	146864900	gb	EDK50271.1	Redoxin domain protein	<i>Shewanella baltica</i> OS223	
339	0	151367325	gb	ABS10325.1	Redoxin domain protein	<i>Shewanella baltica</i> OS185	
340	0	160862965	gb	ABX51499.1	Redoxin domain protein	<i>Shewanella baltica</i> OS195	
341	0	110678293	ref	YP_681300.1	antioxidant, AhpC/Tsa family, putative	<i>Roseobacter denitrificans</i> OCH 114	
342	0	109454409	gb	ABG30614.1	antioxidant, AhpC/Tsa family, putative	<i>Roseobacter denitrificans</i> OCH 114	
343	0	166550175	ref	XP_001603445.1	PREDICTED: similar to peroxiredoxin 5, prdx5	<i>Nasonia vitripennis</i>	
344	0	149062197	gb	EDM12620.1	peroxiredoxin 5, isoform CRA_b	<i>Rattus norvegicus</i>	
345	0	119947074	ref	YP_944754.1	Glutaredoxin-family domain protein	<i>Psychromonas ingrahamii</i> 37	
346	0	119865678	gb	ABM05155.1	Glutaredoxin-family domain protein	<i>Psychromonas ingrahamii</i> 37	
347	0	88858744	ref	ZP_01133385.1	antioxidant, AhpC/Tsa family protein	<i>Pseudoalteromonas tunicata</i> D2	
348	0	88818970	gb	EAR28784.1	antioxidant, AhpC/Tsa family protein	<i>Pseudoalteromonas tunicata</i> D2	
349	0	68075209	ref	XP_679521.1	antioxidant protein	<i>Plasmodium berghei</i> strain ANKA	
350	0	56500288	emb	CAH95621.1	antioxidant protein, putative	<i>Plasmodium berghei</i>	
351	1.60E-20	149203460	ref	ZP_01880430.1	Redoxin	<i>Roseovarius</i> sp. TM1035	
352	0	149143293	gb	EDM31332.1	Redoxin	<i>Roseovarius</i> sp. TM1035	
353	1.39E-15	46128599	ref	XP_388853.1	hypothetical protein FG08677.1	<i>Gibberella zeae</i> PH-1	

333	4.90E-21	150397581 ref	YP_001328048.1	Peroxioredoxin	Sinorhizobium medicae WSM4.19	FSLPGAFTPTCSTYQLPCVSVNVMNAWKGKSOGSGEFGMRSWRY
		150029096 gb	ABR61213.1	Peroxioredoxin	Sinorhizobium medicae WSM4.19	FGVPGAFTPGCKSTHLPCLSVNVEEWEGRAHGNRRLKRFGTGL
334	0	74193815 dbj	BAE22835.1	unnamed protein product	Mus musculus	GTLEAFVPGAFTPTCSQAHPLPCLSVNVMNAWAKWYTLGTRSRRF
335	0	147781540 emb	CAN73709.1	hypothetical protein	Vitis vinifera	G1NEFAVPGAFTPTCSQAHPLPCLSVNVMNAWAKWYTLGTRSRRF
336	9.93E-20	88792795 ref	ZP_01108513.1	antioxidant, AhpC/Tsa family protein	Altermomonas macleodii 'Deep ecotype'	GTLEAFVPGAFTPTCSQAHPLPCLSVNVMNAWAKWYTLGTRSRRF
		88775845 gb	EAR07092.1	antioxidant, AhpC/Tsa family protein	Altermomonas macleodii 'Deep ecotype'	GTLEAFVPGAFTPTCSQAHPLPCLSVNVMNAWAKWYTLGTRSRRF
337	3.23E-22	15218876 ref	NP_176772.1	TPX2 (THIOREDOXIN-DEPENDENT PEROXIDASE 2), an Arabidopsis thaliana	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPFCFSVNMVMAWGWKTYGSGELGIRSRFF
		75337580 sp	Q9SRZ4	PRX2C_ARATH Peroxioredoxin-2C (Peroxioredoxin IIC) (Thiol Arabidopsis thaliana	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPFCFSVNMVMAWGWKTYGSGELGIRSRFF
		6227021 gb	AAF06057.1	AC009513_13 identical to gb	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPFCFSVNMVMAWGWKTYGSGELGIRSRFF
		12083334 gb	AAG48826.1	AF332463_1 putative type 2 peroxiredoxin protein AF121355	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPFCFSVNMVMAWGWKTYGSGELGIRSRFF
		21536698 gb	AAAM61030.1	type 2 peroxiredoxin, putative	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPFCFSVNMVMAWGWKTYGSGELGIRSRFF
		27764988 gb	AAO23615.1	A11965970	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPFCFSVNMVMAWGWKTYGSGELGIRSRFF
		110742929 dbj	BAE99360.1	hypothetical protein	Arabidopsis thaliana	FGVPGAFTPTCSMSHVPFCFSVNMVMAWGWKTYGSGELGIRSRFF
338	8.29E-22	16519985 ref	NP_444105.1	Y4VD_RHISN Putative peroxiredoxin y4vd (Thioredoxin red Y4vd)	Rhizobium sp. NGR234	FSLPGAFTPTCSTQQLPCLSVNVMNAWKGKLSGGEFGMRSWRY
		2496756 sp	Q35212	unknown	Rhizobium sp.	FSLPGAFTPTCSTQQLPCLSVNVMNAWKGKLSGGEFGMRSWRY
		1486441 emb	CAA92419.1	unknown	Rhizobium sp.	FSLPGAFTPTCSTQQLPCLSVNVMNAWKGKLSGGEFGMRSWRY
		2182672 gb	AAB91892.1	Y4vd	Rhizobium sp. NGR234	FSLPGAFTPTCSTQQLPCLSVNVMNAWKGKLSGGEFGMRSWRY
339	4.01E-09	164634770 gb	EDQ99091.1	peroxiredoxin	Laccaria bicolor S238N-H82	IGVPGAFTTPCNHHPAETVYGGQSKRFVLSVAVTITAAKAV
340	0	148827764 ref	YP_001292517.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae PittGG	FSLPGAFTPTCSSSHLPVSVNVMNAWKEDENGEFGKRSWRY
		148719006 gb	ABR00134.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae PittGG	FSLPGAFTPTCSSSHLPVSVNVMNAWKEDENGEFGKRSWRY
341	0	55233150 gb	AAV48533.1	peroxiredoxin-like protein	Aedes aegypti	FAVPGAFTPGCKSTHLPCLSVNVMNAWKGKLSGGEFGMRSWRY
342	9.19E-14	90425550 ref	YP_533920.1	peroxiredoxin-like protein	Rhodopseudomonas palustris BisB18	GFQVFAVPGAFTGCHKMHLPIVSVNVMNAWKGKLSGGEFGMRSWRY
		90107564 gb	ABD89601.1	peroxiredoxin-like protein	Rhodopseudomonas palustris BisB18	GFQVFAVPGAFTGCHKMHLPIVSVNVMNAWKGKLSGGEFGMRSWRY
343	2.42E-09	37783267 gb	AAAP42502.1	peroxiredoxin	Ipomoea batatas	DEGVFLPGAFTVCSAQHVPCVAVNTMNGVAEKLGIJRSRHW
344	0	18654477 gb	AAL35363.2	AF442385_1 thioredoxin peroxidase	Capsicum annuum	FVPGAFTPTCTKHPVGEFCVSNVMNAWAKWYTLGTRSRRY
345	0	116060641 emb	CAL57119.1	putative thioredoxin peroxidase 1 (ISS)	Ostreococcus lauri	LPGEFAVPGAFTPTCSNKHLPVSVNVMNAWAKWYTLGTRSRRY
346	2.59E-18	162888258 gb	EDQ74636.1	predicted protein	Physcomitrella patens subsp. patens	VAVPGAFTPTCSQEHVPPVSVNMVMAWERSYLVRSRRFGAEE
347	7.41E-12	160705313 gb	EAT189429.2	hypothetical protein SNOG_02698	Phaeosphaeria nodorum SN15	GKGVGPAFAFSPSCSEHIPVSVNVMNAWAKWYTLGTRSRRY
348	5.72E-15	149202432 ref	ZP_01879405.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Roseovarius sp. TM1035	FGLPGAFTAACSESHLPCTAVNVMFQWGWKAKMGKRSWRYEPGL
		149144530 gb	EDM32561.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Roseovarius sp. TM1035	FGLPGAFTAACSESHLPCTAVNVMFQWGWKAKMGKRSWRYEPGL
349	0	157361539 gb	ABV44727.1	peroxiredoxin-like protein	Plebotomus papatasi	FAVPGAFTPGCKSTHLPCLSVNVMNAWKGKLSGGEFGMRSWRY
350	5.33E-19	156627935 ref	YP_001448541.1	peroxiredoxin	Vibrio Harvey ATCC BAA-1116	FAVPGAFTPTCSAHLPVSVNVMNAWKGKLSGGEFGMRSWRY
		156972929 gb	ABU74314.1	hypothetical protein VIBHAR_06423	Vibrio Harvey ATCC BAA-1116	FAVPGAFTPTCSAHLPVSVNVMNAWKGKLSGGEFGMRSWRY
351	2.85E-18	163760343 ref	ZP_02167425.1	hypothetical protein HPDFL43_03531	Hoeflea phototrophica DFL-43	FAVPGAFTPTCHLNHLPIVSVNVMNAWKAATGAGKLVRSRKY
		162282294 gb	EDQ32583.1	hypothetical protein HPDFL43_03531	Hoeflea phototrophica DFL-43	FAVPGAFTPTCHLNHLPIVSVNVMNAWKAATGAGKLVRSRKY
352	2.15E-16	126733960 ref	ZP_01749707.1	antioxidant, AhpC/Tsa family, putative	Roseobacter sp. CCS2	FGLPGAFTGTCSTAHVPCVSNVMNAWKGKLSGGEFGMRSWRY
		126716826 gb	EBA13690.1	antioxidant, AhpC/Tsa family, putative	Roseobacter sp. CCS2	FGLPGAFTGTCSTAHVPCVSNVMNAWKGKLSGGEFGMRSWRY
353	0	16758404 ref	NP_446062.1	peroxiredoxin 5 precursor	Rattus norvegicus	FGVPGAFTPGCKSTHLPCLSVNVTAEWGRAHGNRRLKRFGTGL
		20138819 sp	Q9R063	PRDX5_RAT Peroxioredoxin-5, mitochondrial precursor (Prx-5)	Rattus norvegicus	FGVPGAFTPGCKSTHLPCLSVNVTAEWGRAHGNRRLKRFGTGL
		6103726 gb	AAF03751.1	AF110732_1 antioxidant enzyme B166	Rattus norvegicus	FGVPGAFTPGCKSTHLPCLSVNVTAEWGRAHGNRRLKRFGTGL
354	1.53E-23	49476039 ref	YP_034080.1	expressed protein	Bartonella henselae str. Houston-1	FSLPGAFTPTCSTFQLPCLSVNVMNAWKAQFGMRSWRYDPYE
		49238847 emb	CAF28131.1	expressed protein	Bartonella henselae str. Houston-1	FSLPGAFTPTCSTFQLPCLSVNVMNAWKAQFGMRSWRYDPYE
355	7.74E-19	163732598 ref	ZP_02140043.1	antioxidant, AhpC/Tsa family, putative	Roseobacter litoralis Och 149	FAVPGAFTPTCHSAHVPCVSNVMNAWKGKLSGGEFGMRSWRY
		161393958 gb	EDQ18282.1	antioxidant, AhpC/Tsa family, putative	Roseobacter litoralis Och 149	FAVPGAFTPTCHSAHVPCVSNVMNAWKGKLSGGEFGMRSWRY
356	0	55670364 pdb	1URM	A Chain A, Human Peroxioredoxin 5, C47s Mutant	Homo sapiens	FGVPGAFTPGSSKTHLPCLSVNVTGEGWGRAHGNRRLKRFGTGL
						FGVPGAFTPGSSKTHLPCLSVNVTGEGWGRAHGNRRLKRFGTGL
357	4.77E-18	15964668 ref	NP_385021.1	HYPOTHEICAL PEROXIREDOXIN PROTEIN	Sinorhizobium meliloti 1021	GPVEFAVPGAFTPTCSLNHLPIVSVNVMNAWATHSLSGIRSKRY
		15073846 emb	CAC45487.1	HYPOTHEICAL PEROXIREDOXIN PROTEIN	Sinorhizobium meliloti	GPVEFAVPGAFTPTCSLNHLPIVSVNVMNAWATHSLSGIRSKRY
358	1.29E-10	150863887 ref	XP_001382517.2	hypothetical protein PICST_65232	Pichia stipitis CBS 6054	EVENNVAVPGAFTPTCTEIHPIVNAWGLNLSGFSKSGFTGI
		149385143 gb	ABN64488.2	predicted protein	Pichia stipitis CBS 6054	EVENNVAVPGAFTPTCTEIHPIVNAWGLNLSGFSKSGFTGI
359	0	123440531 ref	YP_001004525.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia enterocolitica subsp.	FSLPGAFTPTCSSSHLPVSVNVMNAWKAQFGMRSWRY
		122087492 emb	CAL10273.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia enterocolitica subsp.	FSLPGAFTPTCSSSHLPVSVNVMNAWKAQFGMRSWRY
360	9.80E-20	26989419 ref	NP_744844.1	AhpC/TSA family protein	Pseudomonas putida KT2440	FALPGAFTPTCSERHVPVSVNVMNAWGNLSGELGRRSORY
		24984284 gb	AAAN68308.1	AE016465_1 AhpC/TSA family protein	Pseudomonas putida KT2440	FALPGAFTPTCSERHVPVSVNVMNAWGNLSGELGRRSORY
361	7.37E-19	126463318 ref	YP_001044432.1	Redoxin domain protein	Rhodobacter sphaeroides ATCC 17029	FAVPGAFTPTCHSAHVPGKGVCSVNMVMAWKGKLSGGEFGMRSWRY
		126104982 gb	ABN77660.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Rhodobacter sphaeroides ATCC 17029	FAVPGAFTPTCHSAHVPGKGVCSVNMVMAWKGKLSGGEFGMRSWRY
362	4.14E-21	52424210 ref	YP_087347.1	AHP1 protein	Mannheimia succiniciproducens	FSLPGAFTPTCSSSHLPVSVNVMNAWKAQFGMRSWRY
		52306262 gb	AAU36762.1	AHP1 protein	Mannheimia succiniciproducens	FSLPGAFTPTCSSSHLPVSVNVMNAWKAQFGMRSWRY

363	1.88E-20	76809917	ref	YP_334908.1	AhpC/TSA family protein	Burkholderia pseudomallei 1710b	GPGMFGLPGAF	TPTCSAQHVPCVAVNVMGAWGRDLMGIRSR
		76579370	gb	ABA48845.1	AhpC/TSA family protein	Burkholderia pseudomallei 1710b		
364	7.20E-12	50549203	ref	XP_502072.1	hypothetical protein	Yarrowia lipolytica	VGVPGAFSPAC	SAGHPVAVNVTNAWAESLQAQEGNKRSARY
		49647939	emb	CAG82392.1	unnamed protein product	Yarrowia lipolytica CLIB122		
365	0	114638295	ref	XP_001164542.1	PREDICTED: peroxiredoxin 5 isoform 3	Pan troglodytes	ALRRSAGYAGG	FVPGAFTPGSKTHLPLCSVNVVTGEWGRAH
366	1.30E-10	154277968	ref	XP_001539813.1	predicted protein	Ajiellomyces capsulatus NAm1	GKGLIGSPGAF	SPACSAAYVPVSVNVVTGAWSKVIGNHRSKRY
		150413398	gb	EDN08781.1	predicted protein	Ajiellomyces capsulatus NAm1		
367	1.83E-21	124871189	gb	EAY62905.1	Alkyl hydroperoxide reductase	Burkholderia cenocepacia PC184	FGLPGAF	TPTCSAQHVPCVSNVMGAWGRDLMGIRSLRYDGGV
368	2.08E-19	87120723	ref	XP_01076616.1	antioxidant, AhpC/Tsa family protein	Marinomonas sp. MED121	FALPGAF	TPTCSASHVPCLSVNVMHAWGEAQFGMRSSRYEPGE
		86163951	gb	EAO65223.1	antioxidant, AhpC/Tsa family protein	Marinomonas sp. MED121		
369	6.33E-15	66808689	ref	XP_638067.1	hypothetical protein DDBDRAFT_0218719	Dictyostellium discoideum AX4	FAVPGAF	TPTCSAKHLPCLATNMSAWGKDVGTAVGEDRSQRY
		60466656	gb	EAL64708.1	peroxiredoxin	Dictyostellium discoideum AX4		
370	0	118032125	ref	XP_01503576.1	Redoxin	Burkholderia phymatum STM815	FGLPGAF	TPTCSARHLPVSNVMNAWGRQMQGIRSHRYAPGE
		117982214	gb	EAU96601.1	Redoxin	Burkholderia phymatum STM815		
371	8.80E-21	116782003	gb	ABK22332.1	unknown	Picea sitchensis	FGVPGAF	TPTCSMQHVPKGGICISVNMKEWSKTYLGI
		116785991	gb	ABK23933.1	unknown	Picea sitchensis		
		116787992	gb	ABK24719.1	unknown	Picea sitchensis		
372	0	153835120	ref	XP_01987787.1	AhpC/TSA family/glutaredoxin domain protein	Vibrio Harveyi HY01	FSLPGAF	TPTCSSSHLPVSNVMNAWKADQNGNEFGKRSWRY
		148868427	gb	EDL67538.1	AhpC/TSA family/glutaredoxin domain protein	Vibrio Harveyi HY01		
373	6.94E-19	121608253	ref	YP_996060.1	Redoxin domain protein	Verminephrobacter eiseniae EF01-2	GPCGFALPGAF	TPTCSARHLPVCSVNMVCMGAWAREQLGLRSNRY
		121552893	gb	ABM57042.1	Redoxin domain protein	Verminephrobacter eiseniae EF01-2		
374	1.82E-09	558080	gb	AAB41351.1	Lipomyces kononenkoae subsp. spenceri	Lipomyces kononenkoae subsp.	VVAIPGAF	TPTCTANHIPVLSANVQSAFGKALDPGAFGTRITARY
		1091044	prf		2020307A peroxisomal protein	Lipomyces kononenkoae		
375	2.38E-21	157346281	emb	CAO15978.1	unnamed protein product	Vitis vinifera	SAGEFAVPGAF	TPTCSQKHLPCISVNMVCMKAWKADLLG
376	0	14855582	ref	YP_001263164.1	Redoxin domain protein	Spingomonas Wittichii RW1	AVGEFVPGAF	TPTCSAKHLPCITAVNVMGAWGVSAMGVRGQRF
		148500772	gb	ABO69026.1	Redoxin domain protein	Spingomonas Wittichii RW1		
377	9.33E-21	119475500	ref	XP_01615853.1	antioxidant, AhpC/Tsa family protein	marine gamma proteobacterium	GPQELAVPGAF	TPTGCSMTHLPLCSVNMVCMGAWGTQAQMLGRSKRY
		119451703	gb	EAW32936.1	antioxidant, AhpC/Tsa family protein	marine gamma proteobacterium		
378	9.95E-20	113972141	ref	YP_735934.1	Redoxin domain protein	Shewanella sp. MR-4	FAVPGAF	TPTCEAHLPCVSNVMKAWGEAQDTAGGGVRSQRY
		114049389	ref	YP_739939.1	Redoxin domain protein	Shewanella sp. MR-7		
		117922451	ref	YP_871643.1	Redoxin domain protein	Shewanella sp. ANA-3		
		113886825	gb	ABI40877.1	Redoxin domain protein	Shewanella sp. MR-4		
		113890831	gb	ABI44882.1	Redoxin domain protein	Shewanella sp. MR-7		
		117614783	gb	ABK50237.1	Redoxin domain protein	Shewanella sp. ANA-3		
379	1.07E-20	83719595	ref	YP_441672.1	AhpC/TSA family protein	Burkholderia thailandensis E264	GPGMFGLPGAF	TPTCSAQHVPCVAVNVMGAWGRDLMGIRSR
		83653420	gb	ABC37483.1	AhpC/TSA family protein	Burkholderia thailandensis E264		
380	1.47E-12	50422983	ref	XP_460069.1	hypothetical protein DEHA0E18458g	Debaryomyces Hansenii CBS767	DPLTVSVP	GAFIPTCTANHIPVLSANVLSNAWGKLLMGIRTARY
		49655737	emb	CAG88329.1	unnamed protein product	Debaryomyces Hansenii CBS767		
381	0	16124048	ref	NP_407361.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis CO92	FSLPGAF	TPTCSSSHLPVSNVMNAWKSDQNGNEFGPR
		22124236	ref	NP_667659.1	peroxiredoxin family protein	Yersinia pestis KIM		
		45442886	ref	NP_994425.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis biovar Microtus str.		
		51594477	ref	YP_088668.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pseudotuberculosis IP_32953		
		108806104	ref	YP_650020.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis Antiqua		
		108810217	ref	YP_645984.1	peroxiredoxin/glutaredoxin family protein	Yersinia pestis Nepal516		
		145600775	ref	YP_001164851.1	peroxiredoxin/glutaredoxin family protein	Yersinia pestis Pestoides F		
		150261121	ref	XP_01917849.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis CA88-4125		
		153949361	ref	YP_001399136.1	hybrid peroxiredoxin hyPrx5	Yersinia pseudotuberculosis IP_31758		
		162419256	ref	YP_001604753.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis Angola		
		165928382	ref	XP_02224214.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis biovar Orientalis str.		
		165936984	ref	XP_02225550.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis biovar Orientalis str.		
		166009504	ref	XP_02230402.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis biovar Antiqua str.		
		21957000	gb	AAM83910.1	AE013631_6 peroxiredoxin family protein	Yersinia pestis KIM		
		45437753	gb	AAS63302.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis biovar Microtus str.		
		51587759	emb	CAH19359.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pseudotuberculosis IP_32953		
		108773865	gb	ABG16384.1	peroxiredoxin/glutaredoxin family protein	Yersinia pestis Nepal516		
		108778017	gb	ABG12075.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis Antiqua		
		115349527	emb	CAL22501.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis CO92		

		145212471.gb	ABP41878.1	peroxiredoxin/glutaredoxin family protein	Yersinia pestis Pestoides F	GPKEFALPGAYTGCTTAAHPCLSVNMAAWGKDTLIDRSKRY
		149290529.gb	EDM40606.1	putative peroxiredoxin/glutaredoxin family protein	Yersinia pestis CA88-4125	
		152960856.gb	ABS48317.1	hybrid peroxiredoxin hyPrx5	Yersinia pseudotuberculosis IP_31758	
		162352071.gb	ABX86019.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis Angola	
		165915226.gb	EDR33837.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis biovar Orientalis str.	
		165919612.gb	EDR36845.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis biovar Orientalis str.	
		165991426.gb	EDR43727.1	hybrid peroxiredoxin hyPrx5	Yersinia pestis biovar Anticapa str.	
382	4.00E-16	84500432.ref	ZP_00998681.1	AhpC/TSA family protein	Oceanicola balsensis HTCC2597	
		84391385.gb	EA003717.1	AhpC/TSA family protein	Oceanicola balsensis HTCC2597	
383	0	163915087.ref	NP_001106525.1	hypothetical protein LOC100127718	Xenopus tropicalis	
		159155852.gb	AAI54897.1	Unknown (protein for MGC:180760)	Xenopus tropicalis	
384	0	78046726.ref	YP_362901.1	putative peroxiredoxin	Xanthomonas campestris pv.	
		78035156.emb	CAJ22801.1	putative peroxiredoxin	Xanthomonas campestris pv.	
385	0	20139172.sp	Q9GLW9	PRDX5_PAPHA Peroxiredoxin-5, mitochondrial precursor (F)	Papio hamadryas	
		10305534.gb	AAG13451.2	AF110734_1 peroxiredoxin 5	Papio hamadryas	
386	0	125848532.ref	XP_001342353.1	PREDICTED: hypothetical protein isoform 2	Danio rerio	
387	1.53E-21	120609051.ref	YP_968729.1	Redoxin domain protein	Acidovorax avenae subsp. citrulli	
		120587515.gb	ABM30955.1	Redoxin domain protein	Acidovorax avenae subsp. citrulli	
388	1.92E-13	149244744.ref	XP_001526915.1	conserved hypothetical protein	Lodderomyces elongisporus NRRL YB-	
		146449309.gb	EDK43565.1	conserved hypothetical protein	Lodderomyces elongisporus NRRL YB-	
389	3.05E-18	77463335.ref	YP_352839.1	peroxiredoxin/glutaredoxin family protein	Rhodobacter sphaeroides 2.4.1	
		126462191.ref	YP_001043305.1	Redoxin domain protein	Rhodobacter sphaeroides ATCC_17029	
		77387753.gb	ABA78938.1	peroxiredoxin/glutaredoxin family protein	Rhodobacter sphaeroides 2.4.1	
		126103855.gb	ABN76533.1	Redoxin domain protein	Rhodobacter sphaeroides ATCC_17029	
390	0	42830019.ref	ZP_00155564.1	COG0678: Peroxiredoxin	Haemophilus influenzae R2846	
		145633472.ref	ZP_01789201.1	hypothetical protein CGS_H13655_05114	Haemophilus influenzae 3655	
		145837932.ref	ZP_01793574.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae PttHH	
		144985841.gb	EDJ92449.1	hypothetical protein CGS_H13655_05114	Haemophilus influenzae 3655	
		145268872.gb	EDK08833.1	DNA-binding transcriptional regulator OxyR	Haemophilus influenzae PttHH	
391	0	114320380.ref	YP_742063.1	Glutaredoxin-family domain protein	Alkallimnicola ehrlichei MLHE-1	
		114226774.gb	ABI56573.1	Glutaredoxin-family domain protein	Alkallimnicola ehrlichei MLHE-1	
392	4.01E-18	55792575.gb	AAV65381.1	peroxiredoxin	Prototheca wickerhamii	
393	3.68E-16	118590734.ref	ZP_01548135.1	probable peroxiredoxin protein	Stappia aggregata IAM_12614	
		118436710.gb	EAV43350.1	probable peroxiredoxin protein	Stappia aggregata IAM_12614	
394	1.69E-17	33595793.ref	NP_883436.1	AhpC/TSA-family protein	Bordetella parapertussis 12822	
		33565872.emb	CAE36419.1	AhpC/TSA-family protein	Bordetella parapertussis	
395	0	75911177.ref	YP_325473.1	Glutaredoxin-like region	Anabaena variabilis ATCC_29413	
		75704902.gb	ABA24578.1	Glutaredoxin-like region	Anabaena variabilis ATCC_29413	
396	0	53802780.ref	YP_112582.1	antioxidant, AhpC/Tsa family	Methylococcus capsulatus str. Bath	
		53756541.gb	AAU90832.1	antioxidant, AhpC/Tsa family	Methylococcus capsulatus str. Bath	
397	6.74E-22	52851172.emb	CAH58634.1	thioredoxin-dependent peroxidase	Plantago major	
398	4.00E-17	88798533.ref	ZP_01114117.1	antioxidant, putative	Reinekea sp. MED297	
		88778633.gb	EAR09824.1	antioxidant, putative	Reinekea sp. MED297	
399	0	116183622.ref	ZP_01473602.1	hypothetical protein Vex2w_020003826	Vibrio sp. Ex25	
400	6.36E-19	77464478.ref	YP_353982.1	AhpC/TSA family protein	Rhodobacter sphaeroides 2.4.1	
		77388896.gb	ABA80081.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Rhodobacter sphaeroides 2.4.1	
401	2.28E-10	69936157.ref	ZP_00631017.1	Alky hydroperoxide reductase/ Thiol specific antioxidant/ M	Paracoccus denitrificans PD1222	
402	2.98E-22	30841938.gb	AAAP34571.1	thioredoxin peroxidase 1	Lyopersicon esculentum	
404	0	119505297.ref	ZP_01627372.1	membrane protein	marine gamma proteobacterium	
		119458988.gb	EAV40088.1	membrane protein	marine gamma proteobacterium	
405	2.19E-25	119504215.ref	ZP_01626295.1	AhpC/TSA family protein	marine gamma proteobacterium	
		119459723.gb	EAW40818.1	AhpC/TSA family protein	marine gamma proteobacterium	
406	2.58E-21	134294653.ref	YP_001118388.1	Redoxin domain protein	Burkholderia vietnamiensis G4	
		134137810.gb	ABO53553.1	Redoxin domain protein	Burkholderia vietnamiensis G4	
407	5.80E-15	126740843.ref	ZP_01756528.1	AhpC/TSA family protein	Roseobacter sp. SK209-2-6	
		126718139.gb	EBA14856.1	AhpC/TSA family protein	Roseobacter sp. SK209-2-6	
408	3.79E-19	114570772.ref	YP_757452.1	Redoxin domain protein	Maricaulis maris MCS10	
		114341234.gb	ABI66514.1	Redoxin domain protein	Maricaulis maris MCS10	



409	5.63E-11	83859284	ref	ZP_00952805.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Oceanicaulis alexandrii HTCC2633	DYVYIGVPGAFPTICTKRHLPAKQSGFDQCIVSNMGERSKRY
		83852731	gb	EAP90584.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Oceanicaulis alexandrii HTCC2633	
410	4.26E-12	67903410	ref	XP_681961.1	PM20_ASPU PROBABLE PEROXISOMAL MEMBRANE	Aspergillus nidulans FGSC A4	EKGEFALPGAFTPVCSARHVPVAVLVMSAWGKANECEGRTKRY
411	1.31E-19	40741051	gb	EA460241.1	PM20_ASPU PROBABLE PEROXISOMAL MEMBRANE	Aspergillus nidulans FGSC A4	FSLPGAFPTCSTYQLPCLSVNVMNAWAKGQSGGEGFMRSWRY
		159185196	ref	NP_355351.2	hypothetical protein Au2399	Agrobacterium tumefaciens str. C58	
		159140462	gb	AAK88136.2	conserved hypothetical protein	Agrobacterium tumefaciens str. C58	
412	0	16272515	ref	NP_438729.1	peroxidorexin hybrid Prx5	Haemophilus influenzae Rd KW20	FSLPGAFPTCSSSHLPVSVNVMNAWKEDEGNGEFGKRSWRY
		1723174	sp	P44758	PRX5_HAEIN Hybrid peroxidorexin hyPrx5 (Thioredoxin red	Haemophilus influenzae Rd KW20	
		1573561	gb	AAC22230.1	membrane protein	Haemophilus influenzae Rd KW20	
413	0	15826629	pdb	1HD2	A Chain A, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	FGVPGAFTPGCKSTHLPCLSVNVTGEWGRAHGNRRLKRFGL
		16975155	pdb	1H40	B Chain B, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975157	pdb	1H40	A Chain A, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975158	pdb	1H40	B Chain B, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975159	pdb	1H40	C Chain C, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975160	pdb	1H40	D Chain D, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975161	pdb	1H40	E Chain E, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975162	pdb	1H40	F Chain F, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975162	pdb	1H40	G Chain G, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
		16975162	pdb	1H40	H Chain H, Monoclinic Form Of Human Peroxidorexin 5	Homo sapiens	
414	0	157373008	ref	YP_001480997.1	glutaredoxin-family domain protein	Serratia proteamaculans 568	FSLPGAFPTCSSSHLPVSVNVMNAWAKDQNGNGEFGPRSWRY
		157324772	gb	ABV43869.1	glutaredoxin-family domain protein	Serratia proteamaculans 568	
415	1.30E-19	15231718	ref	NP_190884.1	peroxidorexin type 2, putative	Arabidopsis thaliana	FAVPGAFPTCSQKHVPCISVNVMEAWRKDLGNGELGVRSRRY
		143360522	sp	Q349U7	PRX2E_ARATH Peroxidorexin-2E, chloroplast precursor (Peroxidorexin IIE) (Thioredoxin reductase 2E)	Arabidopsis thaliana	
		7529720	emb	CAB86900.1	peroxidorexin-like protein	Arabidopsis thaliana	
		15451116	gb	AAK96829.1	peroxidorexin-like protein	Arabidopsis thaliana	
		18377484	gb	AAL66908.1	peroxidorexin-like protein	Arabidopsis thaliana	
		23297326	gb	AAN12942.1	putative peroxidorexin	Arabidopsis thaliana	
416	7.30E-14	115523724	ref	YP_780635.1	Redoxin domain protein	Rhodospseudomonas palustris BisA53	GPQVFAVPGAYTGTCHKMHLPIVSVNVMGAWKRDLTGIRSHRY
		115517671	gb	ABJ05655.1	Redoxin domain protein	Rhodospseudomonas palustris BisA53	
417	3.49E-22	21553913	gb	AAM62996.1	peroxidorexin, putative	Arabidopsis thaliana	FGVPGAFPTCSMSHVPCFSVNVKAWGKTYGSGELGHSRRF
418	3.88E-20	71281610	ref	YP_266909.1	antioxidant, AhpC/Tsa family	Colwellia psychrotolerans 34H	FAVPGAFPTCSAAHLPCLSVNVMNAWGESGGVRSQRVDNGE
		71147350	gb	AAZ27823.1	antioxidant, AhpC/Tsa family	Colwellia psychrotolerans 34H	
419	9.88E-13	116791600	gb	ABK26037.1	unknown	Picea sitchensis	DEGVFLPGAFTGVCSAQHVPVSVNVVNGWAEKLLGHSORW
420	5.38E-14	50405605	ref	XP_456439.1	hypothetical protein DEHA0A02717g	Debaryomyces hansenii CBS767	SPGNIGVPGAFSPACSSSHVPIVSVNVNKAWSLLGNERSKRY
		4952103	emb	CAG84391.1	unnamed protein product	Debaryomyces hansenii CBS767	
421	2.28E-21	115350523	ref	YP_772362.1	Redoxin domain protein	Burkholderia ambifaria AMMD	GNFAGLPGAFPTCSAQHVPVSVNVMGAWGRDLMGIRSLRY
		115280511	gb	ABI86028.1	Redoxin domain protein	Burkholderia ambifaria AMMD	
422	3.60E-14	34980256	gb	AAQ84041.1	peroxisomal-like protein	Paracoccidioides brasiliensis	EKGEFSVPGAFPTSCSISHLPIVAVNVMASAWGKANMGERTARY
423	1.05E-11	5326864	gb	AAD42074.1	AF144753_1 peroxisomal membrane protein	Penicillium citrinum	NYNASKEFFALPGAFTPVCSANHPVLAYNVMASAWGKANVTGD
424	2.74E-21	163868799	ref	YP_001610023.1	hypothetical protein Btr_1726	Bartonella tribocorum CIP_105476	FSLPGAFPTCSNFQLPCLSVNVMNAWKGKEQFGMRSWRYDPYE
		161018470	emb	CAK02028.1	conserved hypothetical protein	Bartonella tribocorum CIP_105476	
425	0	124512108	ref	XP_001349187.1	antioxidant protein, putative	Plasmodium falciparum 3D7	DTHEISLPGAFPTCS TKMIPICITNNVLKSWFKSMMGMIRPWRF
		23498955	emb	CAD57033.1	antioxidant protein, putative	Plasmodium falciparum 3D7	
426	0	149911756	ref	ZP_01900362.1	glutaredoxin	Monitella sp. PE36	FSLPGAFPTCSSSHLPVSVNVMNAWKDDQFGKRSWRYEPGD
		149805181	gb	EDM65201.1	glutaredoxin	Monitella sp. PE36	
427	0	16330368	ref	NP_441096.1	membrane protein	Synechocystis sp. PCC 6803	FSLPGAFPTCSSNHLPCLSVNVMFQWGKIQINGEFGMRSWRY
		3915480	sp	P73728	Y1621_SYNY3 Putative peroxidorexin sll1621 (Thioredoxin reductase)	Synechocystis sp. PCC 6803	
		1652858	dbj	BAA17776.1	membrane protein	Synechocystis sp. PCC 6803	
428	0	118033544	ref	ZP_01504987.1	Redoxin	Burkholderia phymatum STM815	QVGEFGLPGAFPTCSAKHVPVSVNVMGAWARDQMGIRSORRY
		117980859	gb	EAU95254.1	Redoxin	Burkholderia phymatum STM815	
429	7.59E-11	68469050	ref	XP_721312.1	peroxidorexin-like protein	Candida albicans SC5314	V5VPGAFPTCTESHLPVLAIVNVNAWGVLDGGFGIIRNKRY
		68470077	ref	XP_720800.1	peroxidorexin-like protein	Candida albicans SC5314	
		77022828	ref	XP_888858.1	hypothetical protein CaJ7_0281	Candida albicans SC5314	
		46442686	gb	EAL01973.1	peroxidorexin-like protein	Candida albicans SC5314	
		46443223	gb	EAL02506.1	peroxidorexin-like protein	Candida albicans SC5314	
		76573671	dbj	BAE44755.1	hypothetical protein	Candida albicans	
430	5.10E-23	13474891	ref	NP_106461.1	peroxidorexin 2 family protein	Mesorhizobium loti MAFF303099	FSLPGAFPTCSTLQLPCLVSVNVMNAWKGALGSGEFGMRSWRY
		14025647	dbj	BAB52247.1	peroxidorexin 2 family protein	Mesorhizobium loti MAFF303099	

431	6.08E-20	153826303	ref	ZP_01977970.1	antioxidant, putative	Vibrio cholerae MZO-2	FAVPGAFPTTCSEAHLPVCSVNMKAWGEADTGNGGVRSQRY
		153828800	ref	ZP_01981467.1	putative antioxidant	Vibrio cholerae 623-39	
		148875753	gb	EDL73888.1	putative antioxidant	Vibrio cholerae 623-39	
		149741131	gb	EDM55190.1	antioxidant, putative	Vibrio cholerae MZO-2	FALPGAFPTTCSAKHVPCVSNVMGAWGREQMGVRSKRYAPGE
432	0	73542657	ref	YP_297177.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Ralstonia eutropha JMP134	ATGVFAVPGAFPTCSQKHLPCVSNVMRAWKESLLGVRSSRY
433	2.91E-20	72120070	gb	AAZ62333.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Ralstonia eutropha JMP134	FSLPGAFPTCSSTHLPCVSNVMNEWAKDQNGEFGKRSWRY
434	0	125681128	gb	EAZ220259.1	hypothetical protein OsJ_005542	Oryza sativa (japonica cultivar-group)	ATGVFAVPGAFPTCSQKHLPCVSNVMRAWKESLLGVRSSRY
		33597584	ref	NP_885227.1	putative glutaredoxin	Bordeletia parapertussis 12822	FSLPGAFPTCSSTHLPCVSNVMNEWAKDQNGEFGKRSWRY
		33574012	emb	CAE38335.1	putative glutaredoxin	Bordeletia parapertussis	FSLPGAFPTCSSTHLPCVSNVMNEWAKDQNGEFGKRSWRY
435	0	115423051	emb	CA_49582.1	putative antioxidant	Bordeletia avium 197N	FALPGAFPTCSQKHVPCVSNVMEAWRKDLGNELGVRSSRY
436	1.31E-19	15292893	gb	AAK92817.1	putative peroxiredoxin protein	Arabidopsis thaliana	GPVFAVPGAFPTTCHKHLPVCSVSNVMGAWKEKASLGVRSKRY
437	3.88E-19	154246537	ref	YP_001417495.1	Redoxin domain protein	Xanthobacter autotrophicus Py2	DLTVCVAVPFAFTPTCCQQHVPVMAAWGKANQGDRTKRYVTYA
		154160622	gb	ABS67838.1	Redoxin domain protein	Xanthobacter autotrophicus Py2	
438	9.25E-12	164427260	ref	XP_964200.2	hypothetical protein NCU03151	Neurospora crassa OR74A	APGVFGLPGAYTGVCSSQHHVPCVSNLGRPSERWWTGAEVILG
		38567255	emb	CAE76545.1	probable peroxisomal membrane protein	Neurospora crassa	
		157071672	gb	EAA34964.2	hypothetical protein NCU03151	Neurospora crassa OR74A	APGVFGLPGAYTGVCSSQHHVPCVSNLGRPSERWWTGAEVILG
439	9.11E-11	18397457	ref	NP_566268.1	ATPRX1IF/PRX1IF (PEROXIREDOXIN IIF); antioxidant/ per	Arabidopsis thaliana	APGVFGLPGAYTGVCSSQHHVPCVSNLGRPSERWWTGAEVILG
		25090885	sp	Q9M770	PRX2F_ARATH Peroxiredoxin-2F, mitochondrial precursor	Arabidopsis thaliana	
		15450355	gb	AAK96471.1	A13g06050/F24F17_3	Arabidopsis thaliana	
440	9.58E-11	20466103	gb	AAAM19973.1	A13g06050/F24F17_3	Arabidopsis thaliana	
441	0	34591895	gb	AAF66133.1	peroxiredoxin	Arabidopsis thaliana	APGVFGLPGAYTGVCSSQHHVPCVSNLGRPSERWWTGAEVILG
442	7.99E-21	83748773	ref	ZP_00945788.1	Probable peroxiredoxin	Ralstonia solanacearum UW551	GNFAVGLPGAFPTTCSARHVPVCSVNMGAWARAQMGVRSQRY
		83724594	gb	EAP71757.1	Probable peroxiredoxin	Aspergillus niger	EKGFEALPGAFPTVCSARHVPVAVLVMASAWGKANEEGRTGRY
443	2.74E-11	145247318	ref	XP_0013959908.1	hypothetical protein An12g08570	Arenicola marina	FAVPGAFPTGCSKTHLPCMAVNMVMDAWGKAHDPGGGNNVRSKRY
		134080642	emb	CAK41307.1	unnamed protein product	Nostoc sp. PCC 7120	FSLPGAFPTCSSTHLPCVSNVMNEWAKTQNGEFGKRSWRY
444	0	68348725	gb	AAV96293.1	peroxiredoxin 5	Aspergillus niger	
445	0	17229033	ref	NP_485581.1	peroxiredoxin 2 family protein/glutaredoxin	Hyacinthus orientalis	LAVPGAFPTCSEKHLRKAGECISVNMKAWKEDLLGVRSSRY
446	5.33E-20	42565527	gb	AA521026.1	peroxiredoxin 2 family protein/glutaredoxin	alpha proteobacterium BAL199	FALPGAFPTCSAKHLPGKVCVSNVMDAWGKDMGTRSKRY
447	0	163795033	ref	ZP_02189002.1	hypothetical protein BAL199_09158	alpha proteobacterium BAL199	FALPGAFPTCSAKHLPGKVCVSNVMDAWGKDMGTRSKRY
		159179852	gb	EDP64379.1	hypothetical protein BAL199_09158	alpha proteobacterium BAL199	FALPGAFPTCSAKHLPGKVCVSNVMDAWGKDMGTRSKRY
448	1.08E-19	24376113	ref	NP_720156.1	antioxidant, AhpC/Tsa family	Shewanella oneidensis MR-1	FAVPGAFPTCSEAHLPVCSVNMKAWGEADTAGGGVRSQRY
		24351145	gb	AAAN57600.1	antioxidant, AhpC/Tsa family	Shewanella oneidensis MR-1	FAVPGAFPTCSEAHLPVCSVNMKAWGEADTAGGGVRSQRY
449	0	119594653	gb	EAW74247.1	hCG2016877_isoform CRA_c	Homo sapiens	GPGEFVPGAFPTGCSKTHLPCVSNVVTGEWGRAHGNRLKRF
450	2.13E-18	163745376	ref	ED_02152736.1	antioxidant, AhpC/Tsa family, putative	Oceanobulbus indolifex HEL-45	FAVPGAFPTCHSAHVPVCSVNMKAWGEATLVGRSKRYGTGE
		161382194	gb	ED_Q006603.1	antioxidant, AhpC/Tsa family, putative	Oceanobulbus indolifex HEL-45	FAVPGAFPTCHSAHVPVCSVNMKAWGEATLVGRSKRYGTGE
451	2.11E-18	154251139	ref	YP_001411963.1	Redoxin domain protein	Parvibaculum lavamentivorans DS-1	KTGEFALPGAFPTCSNQHLPCVSNVMGAWKQMGVRSRY
		154155089	gb	ABS62306.1	Redoxin domain protein	Parvibaculum lavamentivorans DS-1	KTGEFALPGAFPTCSNQHLPCVSNVMGAWKQMGVRSRY
452	0	91785287	ref	YP_560493.1	Putative type 2 peroxiredoxin, AhpC/TSAfamily	Burkholderia xenovorans LB400	FGLPGAFPTCSAKHVPCVSNVMGAWGRDQMGVRSQRYDDGV
		91689241	gb	ABE32441.1	Putative type 2 peroxiredoxin, AhpC/TSAfamily	Burkholderia xenovorans LB400	FGLPGAFPTCSAKHVPCVSNVMGAWGRDQMGVRSQRYDDGV
453	1.30E-16	154312864	ref	XP_001555759.1	hypothetical protein BC1G_05133	Botryotinia fuckeliana B05.10	GECSGVPAAFSPTCSDSHPVPSVNMMAWGSLSLGTNRSKRY
		150849835	gb	EDN25028.1	hypothetical protein BC1G_05133	Botryotinia fuckeliana B05.10	GECSGVPAAFSPTCSDSHPVPSVNMMAWGSLSLGTNRSKRY
454	1.13E-11	115435844	ref	NP_001042680.1	Os01g0266600	Oryza sativa (japonica cultivar-group)	VGSSAAAAAAGVFGVGLPGAYTGCSQAHVPCVSNLGRSSHRW
		75203325	sp	Q9SDD6	PRX2F_ORYSJ Peroxiredoxin-2F, mitochondrial precursor	Oryza sativa (japonica cultivar-group)	VGSSAAAAAAGVFGVGLPGAYTGCSQAHVPCVSNLGRSSHRW
		6630684	dbj	BAA88530.1	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)	
		6815076	dbj	BAF04594.1	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)	
		113532211	dbj	BAF04594.1	putative thioredoxin peroxidase	Oryza sativa (japonica cultivar-group)	
455	0	156095183	ref	XP_001613627.1	peroxiredoxin, putative	Plasmodium vivax Sal-1	ISLPGAFPTCTSKMIPCTNNVLKSWFKNMGMGRPWFDPYE
		148802501	gb	EDL43900.1	peroxiredoxin, putative	Plasmodium vivax	ISLPGAFPTCTSKMIPCTNNVLKSWFKNMGMGRPWFDPYE
456	0	149461406	ref	XP_001513863.1	PREDICTED: similar to chromosome 6 open reading frame	Ornithorynchus anatinus	FGVPGAFPTGCSKTHLPCVSNVAVSEWGRANWAPRGWRFGTGL
457	2.62E-18	119469102	ref	ZP_01612086.1	Peroxiredoxin, AhpC/Tsa family protein	Alteromonadales bacterium TW-7	FAVPGAFPTCSNAHLPCVSNVMKAWGDSQGGIRSSRYVTGL
		119447354	gb	EAW28622.1	Peroxiredoxin, AhpC/Tsa family protein	Alteromonadales bacterium TW-7	FAVPGAFPTCSNAHLPCVSNVMKAWGDSQGGIRSSRYVTGL
458	0	87121427	ref	ZP_01077316.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Marinomonas sp. MED121	FSLPGAFPTCSTSHLPCVSNVMFQWGSQFGMRSRWRYPFE
		86163270	gb	EAG64546.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant	Marinomonas sp. MED121	FSLPGAFPTCSTSHLPCVSNVMFQWGSQFGMRSRWRYPFE
459	0	6563212	gb	AAF17200.1	AF112212_1 putative peroxisomal antioxidant enzyme	Homo sapiens	FGVPGAFPTGCSKTHLPCVSNVTVGEWGRAHGNRLKRFGTGL
		6746355	gb	AAF27531.1	AF124993_1 peroxisomal membrane protein 20	Homo sapiens	FGVPGAFPTGCSKTHLPCVSNVTVGEWGRAHGNRLKRFGTGL
		6523289	emb	CAB62210.1	human thiol peroxidase homologous protein	Homo sapiens	FGVPGAFPTGCSKTHLPCVSNVTVGEWGRAHGNRLKRFGTGL

460	0	23128019	ref	ZP_00109876.1	COG0678: Peroxiredoxin	Nostoc punctiforme PCC 73102	FSLPGAYTPTCSSSTHLPCLISVNMVMEWSKDDQNGEFGKRSWRY
461	5.50E-21	124896938	gb	EAY69818.1	Peroxiredoxin	Burkholderia dolosa AUO158	GPDGLPGAFPTCSAQHVPCVSVNMVGMWGRDLMGIRSLRY
462	7.10E-20	119776645	ref	YP_929385.1	antioxidant, AhpC/Tsa family	Shewanella amazonensis SB2B	FAVPGAFPTCSAAHLPCISVNMVMAWGDQADTQAGGVRSQRY
463	1.74E-14	119769145	gb	ABM01716.1	antioxidant, AhpC/Tsa family	Shewanella amazonensis SB2B	FALPGAFTPACSESHLPCMAVNMVFMQWAKSQNGEMGMRSWRY
464	0	84509686	gb	EAO06044.1	alkyl hydroperoxide reductase/thiol-specific antioxidant	Loktanella vesifoldensis SKA53	FALPGAFTPACSESHLPCMAVNMVFMQWAKSQNGEMGMRSWRY
		58580531	ref	YP_199547.1	peroxiredoxin	Xanthomonas oryzae pv. oryzae	FAVPGAFTPTCSAKHLPLCTAVNMVMPAWGRNPMGLRSRCYEPGE
		84622490	ref	YP_449862.1	peroxiredoxin	Xanthomonas oryzae pv. oryzae MAFF	
		58425125	gb	AAW74162.1	peroxiredoxin	Xanthomonas oryzae pv. oryzae	
		84366430	dbj	BAE67588.1	peroxiredoxin	Xanthomonas oryzae pv. oryzae MAFF	
465	3.23E-11	147779443	emb	CAN74358.1	hypothetical protein	Vitis vinifera	RLLSAKSLDSGEFAVPGAFPTCSQKHLPVARSQRQCVYVQ
466	0	154302296	ref	XP_0011551558.1	hypothetical protein BC1G_09932	Botryotinia fuckeliana B05.10	FSLPGAFTPTCSASHLPVMSAWGKANFLSDNDGERTGRYGRGE
467	7.94E-15	150855420	gb	EDN30612.1	hypothetical protein BC1G_09932	Botryotinia fuckeliana B05.10	
		119499261	ref	XP_001266388.1	allergen, putative	Neosartorya fischeri NRRL 181	FSVPGAFTPTCSANHLPLVLSNVMMSAWGKANVTGDLSDPQARF
		119414552	gb	EAW24491.1	allergen, putative	Neosartorya fischeri NRRL 181	
468	7.57E-13	83764509	dbj	BAE54653.1	unnamed protein product	Aspergillus oryzae	GKGVGVPAAFPACSSSHVPPVSVNMVMAWATSLGNHRSKRY
469	4.36E-12	83772610	dbj	BAE62736.1	unnamed protein product	Aspergillus oryzae	FALPGAFTVCSANHPVAVLMSAWAKANEERTKRYVTYA
470	3.36E-14	68480197	ref	XP_715909.1	putative peroxiredoxin	Candida albicans SC5314	IGVPGAFTSPACSSASHVPVAVNVTKAWGEQLSTGAGNERSKRY
		46437554	gb	EAK96898.1	putential peroxiredoxin	Candida albicans SC5314	
471	1.24E-20	125538439	gb	EAY84834.1	hypothetical protein Osl_006067	Oryza sativa (indica cultivar-group)	ATGVFAVPGAFTPTCSQKHLPCVSVNMVMAWAKESLLGVRSRRY
472	1.77E-19	113935292	ref	ZP_01421190.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Caulobacter sp. K31	FAVPGAFTPTCSAKHLPCVSVNMVMAWGDQNGEMGLRSQRY
473	0	162868834	gb	EDQ73221.1	predicted protein	Caulobacter sp. K31	
474	1.86E-15	75676870	ref	YP_319291.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Physcomitrella patens subsp. patens	GAGOFVPGAFTPTCSSKHLPCVSVNMVMAWQKSGKALGIRSRRY
		74421740	gb	ABA05939.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Nitrobacter winogradskyi Nb-255	FAVPGAYTGCHKQHLPGKGVISVNMVMAWKRDTLGIKRSRY
475	0	159462450	ref	XP_001689455.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Nitrobacter winogradskyi Nb-255	GEGOFVPGAFTPTCSLKHVPCVSVNMVMAWGDQNGEMGLRSRY
		158283443	gb	EDP09193.1	peroxiredoxin, type II	Chlamydomonas reinhardtii	
476	0	148234370	ref	NP_001085580.1	peroxiredoxin, type II	Chlamydomonas reinhardtii	FGVPGAFTPGCSKTHLPCLISVNMVSEWGWKVGHNQRCKRFGTGL
		49119374	gb	AAH72972.1	MGCB2521 protein	Xenopus laevis	
477	0	87200020	ref	YP_497277.1	MGCB2521 protein	Xenopus laevis	GPEAFSPVPGAFTPTCSAKHLPLCTAVNMVMAWGAANLGIKRGQRF
		87135701	gb	ABD26443.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Novosphingobium aromaticovorans	FAVPGAYTGYCTEAHLPLCIAVNMVLPAAATFHDRSKRYGTCE
478	6.51E-09	88662479	gb	ABD53356.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Novosphingobium aromaticovorans	
		89052930	ref	YP_508381.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Jamaichia sp. CCS1	FAVPGAYTGYCTEAHLPLCIAVNMVLPAAATFHDRSKRYGTCE
479	1.97E-18	159480856	ref	XP_001698498.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Chlamydomonas reinhardtii	LTTEFAVPGAFTPTCSQKHLPLCLISVNMVMAWQSQSILGVRSQRY
		158282338	gb	EDP07991.1	peroxiredoxin type II	Chlamydomonas reinhardtii	
480	1.12E-21	121592722	ref	YP_984618.1	Redoxin domain protein	Acidovorax sp. JS42	FAVPGAFTPTCSAKHVPCVSVNMVMAWGDQATGLLGLRSNRY
		120604802	gb	ABM40542.1	Redoxin domain protein	Acidovorax sp. JS42	
481	0	89092171	ref	ZP_01165126.1	putative peroxiredoxin/glutaredoxin family protein	Oceanospirillum sp. MED92	FALPGAFTPTCSSSTHLPCLISVNMVMAWEDQNGEFGKRSWRY
		89083906	gb	EAR63123.1	putative peroxiredoxin/glutaredoxin family protein	Oceanospirillum sp. MED92	FSLPGAFTPTCSSSHLPCLISVNMVMAWAAEEGNGEFGKRSWRY
482	0	15676839	ref	NP_273984.1	peroxiredoxin 2 family protein/glutaredoxin	Neisseria meningitidis Z2491	
		15794087	ref	NP_283909.1	redoxin	Neisseria meningitidis Z2491	
		7226184	gb	AAF41352.1	peroxiredoxin 2 family protein/glutaredoxin	Neisseria meningitidis MC58	
		121052038	emb	CAM08347.1	putative redoxin	Neisseria meningitidis Z2491	
483	1.04E-15	148252528	ref	YP_001237113.1	Putative peroxiredoxin	Bradyrhizobium sp. BTA11	FAVPGAFTPTCSAKHLPLCLISVNMVMAWKRDTLGIKRSRY
		146404701	gb	ABG33207.1	Putative peroxiredoxin	Bradyrhizobium sp. BTA11	
484	1.28E-11	130360	sp	P14292	PMPA_CANBO Putative peroxiredoxin-A (Thioredoxin reduc	Candida boidinii	GPLEVSPVPGAFTPPCTEQHLPSVNMVMAWQKGLLGTTRSGRL
		170899	gb	AAA34357.1	peroxisomal membrane protein (PMP20A)	Candida boidinii	
485	0	27807445	ref	NP_777174.1	peroxiredoxin 5 precursor	Bos taurus	FGLPGAFTPGCSKTHLPCLTVNVTEEWARTHGNHRLKRFGTGL
		12407851	gb	AAAG53661.1	AF305564_1 peroxiredoxin 5	Bos taurus	
486	1.03E-22	152997944	ref	YP_001342779.1	Redoxin domain protein	Marinomonas sp. MWYL1	FAVPGAFTPTCSASHLPCLISVNMVMAWGANIMGIRRRRYEPGE
		150838868	gb	ABR72844.1	Redoxin domain protein	Marinomonas sp. MWYL1	
487	4.66E-17	163741124	ref	ZP_02148516.1	peroxiredoxin/glutaredoxin family protein	Phaeobacter gallaeciensis 2.10	FSLPGAFTPTCSTYQLPCMSVNMVMAWESQSGSEFGNRSWRY
		161385477	gb	EDQ09854.1	peroxiredoxin/glutaredoxin family protein	Phaeobacter gallaeciensis 2.10	
488	9.72E-12	154294333	ref	XP_001547608.1	hypothetical protein BC1G_13939	Botryotinia fuckeliana B05.10	KVGEIGVPAAFSPSCSNSHIPVAVNVTKAWGSLTGGPRSKRY
		150844778	gb	EDN19971.1	hypothetical protein BC1G_13939	Botryotinia fuckeliana B05.10	
489	0	61664993	gb	AAFO4856.1	AF197952_1 thioredoxin peroxidase PMP20	Homo sapiens	FGVPGAFTPGCSKTHLPCLISVNMVTEWGRATGNRRRLKRFGTGL
490	0	149725546	ref	XP_001489792.1	PREDICTED: similar to peroxiredoxin 5	Equus caballus	FGVPGAFTPGCSKTHLPCLTVNVTEEWGRATGNRRRLKRFGTGL

491	0	33600320	ref	NP_887880.1	AhpC/Tsa-family protein	Bordetella bronchiseptica RB50	GTLTFVAVPGAFPTCSAKHLPCVAVNVMGAWREGQMGVRSQRY
492	1.43E-19	33567919	emb	CAE31832.1	AhpC/Tsa-family protein	Bordetella bronchiseptica RB50	FSLPGAFPTCSTYQLPCLSVNVMQWAKAGSGEGFLRSWRY
		7469151	pir		S39907 conserved hypothetical protein 10 - Rhodobacter ca	Rhodobacter capsulatus	FSLPGAFPTCSSNHLPCLISVNVMFQWGRQQNGEFGMRWSRY
493	0	126654766	ref	ZP_01726300.1	membrane protein	Cyanotheca sp. CCY0110	FSLPGAFPTCSSNHLPCLISVNVMFQWGRQQNGEFGMRWSRY
		126623501	gb	EAZ94205.1	membrane protein	Cyanotheca sp. CCY0110	FSLPGAFPTCSSNHLPCLISVNVMFQWGRQQNGEFGMRWSRY
494	0	90078122	dbj	BAE88741.1	unnamed protein product	Miaca fascicularis	FGVPGAFTPGCKTHLPCLSVNVTGTEWGRAHGNRRLKRFGTGL
495	0	159026585	emb	CAO86518.1	unnamed protein product	Microcystis aeruginosa PCC.7806	FALPGAFPTCSLHLPCLSVNVMNEWAKDQNGEFGKRSWRY
496	5.84E-15	126726172	ref	ZP_01742014.1	antioxidant, AhpC/Tsa family protein	Rhodobacteriales bacterium HTCC2150	FGLPAGYRITCSAAHVPCSVNVMQSWGIDITFTGELIDROKRF
		126706376	gb	EBA04467.1	antioxidant, AhpC/Tsa family protein	Rhodobacteriales bacterium HTCC2150	FAVPGAFPTCSEAHLPCLISVNVKAWGEAQDTAAGGVRSQRY
497	7.25E-20	91794888	ref	YP_564539.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Shewanella denitrificans OS217	FAVPGAFPTCSEAHLPCLISVNVKAWGEAQDTAAGGVRSQRY
		91716890	gb	ABE56816.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ M	Shewanella denitrificans OS217	FAVPGAFPTCSEAHLPCLISVNVKAWGEAQDTAAGGVRSQRY
498	1.10E-20	89092553	ref	ZP_01165606.1	antioxidant, putative	Oceanospirillum sp. MED92	FALPGAFPTCSASHLPCLSVNVMKAWAEVQDGGAGGITRSQRY
		89083065	gb	EAR62284.1	antioxidant, putative	Oceanospirillum sp. MED92	FALPGAFPTCSASHLPCLSVNVMKAWAEVQDGGAGGITRSQRY
499	2.09E-14	149120868	ref	ZP_01847309.1	Redoxin domain protein	Methylobacterium sp. 4-46	GPVAVAVPGAFPTCHRNLPTVTSVNVLDAWAKAALGVRSKRY
		148521259	gb	EDK94215.1	Redoxin domain protein	Methylobacterium sp. 4-46	GPVAVAVPGAFPTCHRNLPTVTSVNVLDAWAKAALGVRSKRY
500	1.19E-14	164645618	gb	EDR09865.1	peroxiredoxin	Laccaria bicolor S238N-H82	ALSTNFSVPGAFPTCHANLPLVMSGWGRFELGHRITWRFPGV
501	0	21367068	gb	AAM49795.1	AF-516693_1 peroxiredoxin	Pyrococcus rufa	KEGEFVPGAFPTGCKTHLPCLSVNVMMSAWKEHGGYRSKRY
502	0	119367465	gb	ABL67649.1	putative thioredoxin-dependent peroxidase	Citrus cv. Shiranuhi	GLAFVPGAFPTCSLKHVPCISVNVKAWAKFTLGRSRRF
503	0	6755114	ref	NP_036151.1	peroxiredoxin 5 precursor	Mus musculus	FGVPGAFTPGCKTHLPCLSVNVIEWGRAHGNRRLKRFGTGL
		20141789	sp	P99029	PRDX5_MOUSE Peroxiredoxin-5, mitochondrial precursor (M	Mus musculus	FSLPGAFPTCSSLQLPCCSVNTMNAWAEKMFGNRSWRYDPT
		6166491	gb	AAF04855.1	AF19795_1 thioredoxin peroxidase PMP20	Mus musculus	FGVPGAFTPGCKTHLPCLSVNVTEMVWGRAHGNRRLKRFDTGL
		14198231	gb	AAH08174.1	Peroxiredoxin 5	Mus musculus	FGVPGAFTPGCKTHLPCLSVNVTEMVWGRAHGNRRLKRFDTGL
504	1.62E-11	148701310	gb	EDL33257.1	peroxiredoxin 5, isoform CRA_b	Mus musculus	FGVPGAFTPGCKTHLPCLSVNVTEMVWGRAHGNRRLKRFDTGL
505	0	2598045	emb	CYA05528.1	PMP20	Schizosaccharomyces pombe	VGVPGAFTPCCSSQVGVVAVNVTKAWKSFADAGFGLRSKRY
506	1.81E-18	77359709	ref	YP_339284.1	peroxiredoxin/glutaredoxin protein	Pseudoalteromonas haloplanktis	FSLPGAFPTCSSTHLPCLSVNVMNAWAEHGGNGEFGKRSWRY
		76874620	emb	CAI8584.1	putative peroxiredoxin/glutaredoxin family protein	Pseudoalteromonas haloplanktis	FSLPGAFPTCSSTHLPCLSVNVMNAWAEHGGNGEFGKRSWRY
		83952991	ref	ZP_00961716.1	hypothetical protein ISM_00005	Roseovarius nubinihibens ISM	FSLPGAFPTCSSLQLPCCSVNTMNAWAEKMFGNRSWRYDPT
		83935620	gb	EAF74924.1	hypothetical protein ISM_00005	Roseovarius nubinihibens ISM	FSLPGAFPTCSSLQLPCCSVNTMNAWAEKMFGNRSWRYDPT
507	0	47523086	ref	NP_999309.1	peroxiredoxin 5	Sus scrofa	FGVPGAFTPGCKTHLPCLSVNVTEMVWGRAHGNRRLKRFDTGL
		10306336	gb	AAG13452.2	AF110735_1 peroxiredoxin 5	Sus scrofa	FGVPGAFTPGCKTHLPCLSVNVTEMVWGRAHGNRRLKRFDTGL
508	0	85708403	ref	ZP_01039469.1	AhpC/Tsa family protein	Erythrobacter sp. NAP1	TISVGFVPGAFPTCSAKHLPCVAVNVMGAWNSAAMGKRQGRF
		85689937	gb	EAO29940.1	AhpC/Tsa family protein	Erythrobacter sp. NAP1	TISVGFVPGAFPTCSAKHLPCVAVNVMGAWNSAAMGKRQGRF
509	2.31E-12	50553945	ref	XP_504381.1	hypothetical protein	Yarrowia lipolytica	VSVPVPGAFPTCTANHIPVISANVL SAWGRALFGERTARYEPGK
		49650250	emb	CAG79980.1	unnamed protein product	Yarrowia lipolytica C.LIB122	VSVPVPGAFPTCTANHIPVISANVL SAWGRALFGERTARYEPGK
510	6.78E-16	145251784	ref	XP_001397405.1	hypothetical protein An16g00920	Aspergillus niger	DKGEFSVPGAFPTCSINHVPVIASVNVMSAWGKANSGGRTGRF
		134082942	emb	CAK46778.1	unnamed protein product	Aspergillus niger	DKGEFSVPGAFPTCSINHVPVIASVNVMSAWGKANSGGRTGRF
511	1.77E-11	115386734	ref	XP_001209908.1	hypothetical protein ATEG_07222	Aspergillus terreus NIH2624	FALPGAFTPVCSARHPVAVVAVVMSAWGKANEEGRTGRVTVYA
		114190906	gb	EAU32606.1	hypothetical protein ATEG_07222	Aspergillus terreus NIH2624	FALPGAFTPVCSARHPVAVVAVVMSAWGKANEEGRTGRVTVYA
512	0	111608943	gb	ABH11029.1	peroxiredoxin II	Polymella parva	FGLPGAFPTCSKSHVPCISVNVKAWGDSLDQYLGLRSKRY
513	9.74E-17	148559629	ref	YP_001258495.1	thiol peroxidase	Brucella ovis ATCC 25840	FAVPGAFPTCSLHLPVAVNVMGAWAQSTGEGKLGVRSKRY
		148370886	gb	ABO60865.1	thiol peroxidase	Brucella ovis ATCC 25840	FAVPGAFPTCSLHLPVAVNVMGAWAQSTGEGKLGVRSKRY
514	0	145588361	ref	YP_001154958.1	Redoxin domain protein	Polynucleobacter sp. QLW-P1DMWA-1	GNAFALPGAFPTCSAKHVPCISVNVMGAWGRDQLGVRSDRY
		145046767	gb	ABF33394.1	Redoxin domain protein	Polynucleobacter sp. QLW-P1DMWA-1	GNAFALPGAFPTCSAKHVPCISVNVMGAWGRDQLGVRSDRY
515	2.44E-21	118701527	ref	ZP_01559586.1	Redoxin	Burkholderia ambifaria MC40-6	GNAFGLPGAFPTCSAQHVPCVSNVVMGAWGRDLMGIRSLRY
		118640997	gb	EAV47850.1	Redoxin	Burkholderia ambifaria MC40-6	GNAFGLPGAFPTCSAQHVPCVSNVVMGAWGRDLMGIRSLRY
516	0	56461578	ref	YP_156689.1	Peroxiredoxin, AhpC/Tsa family	Idiomarina lithiensis L2TR	DPAEFSVPGAFPTCSEKHLPCVAVNVMKAWGESLGGIRSKRY
		56180588	gb	AAV83310.1	Peroxiredoxin, AhpC/Tsa family	Idiomarina lithiensis L2TR	DPAEFSVPGAFPTCSEKHLPCVAVNVMKAWGESLGGIRSKRY
517	8.53E-18	158422110	ref	YP_001523402.1	alkyl hydroperoxide reductase	Azorhizobium caulinodans ORS 571	GPVPFVAVPGAFPTCHKHNLPTVTSVNVMGAWAEQASLGLRSKRY
		158328999	dbj	BAF86484.1	alkyl hydroperoxide reductase	Azorhizobium caulinodans ORS 571	GPVPFVAVPGAFPTCHKHNLPTVTSVNVMGAWAEQASLGLRSKRY
518	7.23E-22	11612206	gb	AAG37299.1	unknown	Sinorhizobium fredii	FSLPGAFPTCSTQQLPCLSVNVMNAWGKALGSGEFGMRWSRY
519	5.59E-19	153886672	ref	ZP_02009812.1	Redoxin domain protein	Ralstonia pickettii 12D	GNAFGLPGAFPTCSARHVPVAVNVMGAWARTQMGVRSQRY
		151574838	gb	EDN39254.1	Redoxin domain protein	Ralstonia pickettii 12D	GNAFGLPGAFPTCSARHVPVAVNVMGAWARTQMGVRSQRY
521	4.79E-14	163737141	ref	ZP_02144559.1	Redoxin	Phaeobacter gallaeciensis BS107	SVGEFVPGAFPTCHSAHVPCISVNVKAWSEATLIGRSLRY
		161389745	gb	EDQ14096.1	Redoxin	Phaeobacter gallaeciensis BS107	SVGEFVPGAFPTCHSAHVPCISVNVKAWSEATLIGRSLRY
522	5.24E-21	119946480	ref	YP_944160.1	antioxidant, AhpC/Tsa family protein	Psychromonas ingrahamii 37	FAVPGAFPTCSESHLPCLVAVNVMKAWGEAHGDDGGVRSQRY
		119865084	gb	ABM04561.1	antioxidant, AhpC/Tsa family protein	Psychromonas ingrahamii 37	FAVPGAFPTCSESHLPCLVAVNVMKAWGEAHGDDGGVRSQRY

Hit#	p-value	gi number	db	protein accession	Name	Species	Active Site Signature
1	1.73E-23	145830494	ref	ZP_01786274.1	probable thiol peroxidase	<i>Haemophilus influenzae</i> 22.4-21	NIIPSIDTGVCATSVHICISADAAQARFCEGIENAGVDLAGLTSRA
		144983884	gb	EDJ91326.1	probable thiol peroxidase	<i>Haemophilus influenzae</i> R3021	
2	0	16272692	ref	NP_438910.1	thiol peroxidase	<i>Haemophilus influenzae</i> Rd KW20	NIIPSIDTGVCATSVRCISADAAQARFCEGIENAGVDLAGLTSRA
		2501345	sp	Q57549	TPX_HAEIN Probable thiol peroxidase	<i>Haemophilus influenzae</i> Rd KW20	
		34809842	pdb	1Q98	A Chain A, Structure Of A Thiol Peroxidase From <i>Haemophilus influenzae</i>	<i>Haemophilus influenzae</i> Rd KW20	
		34809843	pdb	1Q98	B Chain B, Structure Of A Thiol Peroxidase From <i>Haemophilus influenzae</i>	<i>Haemophilus influenzae</i> Rd KW20	
		1573759	gb	AAC22410.1	thiol peroxidase (tpx)	<i>Haemophilus influenzae</i> Rd KW20	
3	3.25E-14	119775598	ref	YP_928338.1	antioxidant, AhpC/TSA family	<i>Shewanella amazonensis</i> SB2B	SVTSVAVPSLDTGVCAALQTKTLSTDAQKRFCDRGLLARSVDAEGT
		119768098	gb	ABM00669.1	antioxidant, AhpC/TSA family	<i>Shewanella amazonensis</i> SB2B	
4	1.32E-16	88857868	ref	ZP_01132510.1	putative periplasmic thiol peroxidase	<i>Pseudoalteromonas tunicata</i> D2	ISAYANGVKSVPVSLDTGICSLQTKTISADAQKRFCDMGLLSRA
		88819485	gb	EAR29298.1	putative periplasmic thiol peroxidase	<i>Pseudoalteromonas tunicata</i> D2	
5	4.19E-17	15696549	ref	NP_349898.1	Thiol peroxidase, TPX	<i>Clostridium acetobutylicum</i> ATCC	KGKEVTLAVPSVDTPVCDLEVKVTISMDAQSRWCELGILLARAKVT
		24212523	sp	Q97E14	TPX_CLOAB Probable thiol peroxidase		
		15026384	gb	AAK81238.1	AE007827_6 Thiol peroxidase, TPX		
6	3.86E-21	71736685	ref	YP_274830.1	thiol peroxidase	<i>Pseudomonas syringae</i> pv.	QVTNIFPSVDPTTCATSVRCISADAAQSRFCEGIENLVKGLTARA
		71557238	gb	AAZ36449.1	thiol peroxidase	<i>Pseudomonas syringae</i> pv.	
7	1.23E-22	41407751	ref	NP_960587.1	thiol peroxidase	<i>Mycobacterium avium</i> subsp.	NIIPSIDTGVCATSVRAGAGATNVSKDAQARFCGVTMAGLLARA
		25899385	gb	AAL40871.1	20 kDa protein	<i>Mycobacterium avium</i> subsp.	
		41396105	gb	AA503970.1	Tpx	<i>Mycobacterium avium</i> subsp.	
		73698151	gb	AAZ81613.1	putative thiolperoxidase	<i>Mycobacterium avium</i> subsp.	
8	1.43E-17	153003735	ref	YP_001378060.1	Redoxin domain protein	<i>Anaeromyxobacter</i> sp. Fw109-5	VGAKAPNIVPSLDTAVCATSTRVVSADAAKRFVTVLGLCGRA
		152027308	gb	ABS25076.1	Redoxin domain protein	<i>Anaeromyxobacter</i> sp. Fw109-5	
9	0	160891883	ref	ZP_02072886.1	hypothetical protein BACUNI_04341	<i>Bacteroides uniformis</i> ATCC 8492	NIIPSLDTGVCATSVRAISKDAHARFCEGIENGVRLAGLLARS
		156858361	gb	EDO51792.1	hypothetical protein BACUNI_04341	<i>Bacteroides uniformis</i> ATCC 8492	
10	8.66E-22	51245650	ref	YP_065534.1	thiol peroxidase	<i>Desulfotalea psychrophila</i> L5v54	VSLNGSLTNIIFSIDTVPVCAVMSVRCISADAHARFCLTGLLARA
		50876687	emb	CAG36527.1	probable thiol peroxidase	<i>Desulfotalea psychrophila</i> L5v54	
11	2.58E-13	149194723	ref	ZP_01871818.1	putative thiol peroxidase-scavengase p20 oxidoredu	<i>Caminibacter mediatlanticus</i> TB-2	VVTIIVPSLDTVPVCAVETTVVSMDDAAKRFCEGIENLLRGLCARA
		149135146	gb	EDM23627.1	putative thiol peroxidase-scavengase p20 oxidoredu	<i>Caminibacter mediatlanticus</i> TB-2	
12	2.58E-12	116873012	ref	YP_849793.1	thiol peroxidase, putative	<i>Listeria welshimeri</i> serovar 6b str.	VGTERKEVTSVVVPSIDTSVCSTQTRTISVDAQKWKWCELRLARS
		116741890	emb	CAK21014.1	unnamed protein product	<i>Listeria welshimeri</i> serovar 6b str.	
13	4.21E-16	113963548	ref	YP_733341.1	Redoxin domain protein	<i>Shewanella</i> sp. MR-4	TVTSAVPSLDTGVCAALQTKTISTDAQKRFCDYGLLARAIDAEGQ
		114046781	ref	YP_737331.1	Redoxin domain protein	<i>Shewanella</i> sp. MR-7	
		113884232	gb	ABI38284.1	Redoxin domain protein	<i>Shewanella</i> sp. MR-4	
		113888223	gb	ABI42274.1	Redoxin domain protein	<i>Shewanella</i> sp. MR-7	
14	2.34E-18	149113873	ref	ZP_01840630.1	Redoxin domain protein	<i>Shewanella batlica</i> OS223	TVTSAVPSLDTGVCAALQTKTISADAAQKRFCDYGLLARAIDAEGK
		146966624	gb	EDK51851.1	Redoxin domain protein	<i>Shewanella batlica</i> OS223	
15	9.02E-09	125823189	ref	YP_001031672.1	thiol peroxidase	<i>Lactococcus lactis</i> subsp. cremoris	PDFELTSVFFPDINTRVCSLQTKQKNWCGVDITLADLKGRLARS
		124491997	emb	CAL96924.1	thiol peroxidase	<i>Lactococcus lactis</i> subsp. cremoris	
16	6.98E-19	149372511	ref	ZP_01891623.1	Peroxiredoxin	unidentified eubacterium SCB49	NIIPSVDTGVCAASARCISRDAQARFCEGIENGVTFDFGLHARA
		149354554	gb	EDM43118.1	Peroxiredoxin	unidentified eubacterium SCB49	
17	6.01E-14	77360152	ref	YP_339727.1	periplasmic thiol peroxidase	<i>Pseudoalteromonas haloplanktis</i>	VSAGKGVASVPSLDTGICSLQTKTISDAQKRFCDMGLLTRA

			76675063	emb	CAI86284.1	putative periplasmic thiol peroxidase	Pseudoalteromonas haloplanktis	
18	0	42543455	pdb	1QXH		A Chain A, Crystal Structure Of Escherichia Coli Thiol Peroxidase	Escherichia coli	DVTNIFPSIDTGVCAASVRCISADQAQSRFCEGLNVLKGLAARA
		42543456	pdb	1QXH		B Chain B, Crystal Structure Of Escherichia Coli Thiol Peroxidase	Escherichia coli	
19	0	117925430	ref	YP_866047.1		Redoxin domain protein	Magnetococcus sp. MC-1	VLTNIFPSLDTPVCAASVRCISRDAHKRFCLAGLCARAEALAA
			gb	ABK44641.1		thiol peroxidase (atypical 2-Cys peroxiredoxin)	Magnetococcus sp. MC-1	
20	2.37E-15	157693338	ref	YP_001487800.1		thiol peroxidase	Bacillus pumilus SAFR-032	SVTSVIPSIDTGVCDAGTREEAAGLTISADAQARWCLELRLARG
		157682096	gb	ABV63240.1		thiol peroxidase	Bacillus pumilus SAFR-032	
21	3.63E-17	30022714	ref	NP_834345.1		Thiol peroxidase	Bacillus cereus ATCC 14579	SVVPSIDTGVCDAAQTRTISADAQKRWCVVTELRLLARAYVSEGT
		49481384	ref	YP_038688.1		thiol peroxidase	Bacillus thuringiensis serovar	
		29899273	gb	AAP11546.1		Thiol peroxidase	Bacillus cereus ATCC 14579	
		49332940	gb	AAT163586.1		thiol peroxidase	Bacillus thuringiensis serovar	
22	2.96E-17	475655054	ref	ZP_00236097.1		thiol peroxidase	Bacillus cereus G9241	SVVPSIDTGVCDAAQTRTISADAQKRWCVVTELRLLARAYVSEGT
		47557840	gb	EAL16165.1		thiol peroxidase	Bacillus cereus G9241	
23	0	90412880	ref	ZP_01220880.1		tagD protein	Photobacterium profundum 3TCK	NIFPSIDTPVCATSVRCISADATGRFCEGIEGVLRLGATRALVT
		90326239	gb	EAS42666.1		tagD protein	Photobacterium profundum 3TCK	
24	4.88E-17	55821023	ref	YP_139465.1		thiol peroxidase	Streptococcus thermophilus LMG	SILPSIDTGTICSTQTRTISVDAQARWCEGLNAEWHLARALVT
		55822943	ref	YP_141384.1		thiol peroxidase	Streptococcus thermophilus	
		116627785	ref	YP_820404.1		thiol peroxidase	Streptococcus thermophilus LMD-9	
		55737008	gb	AAV60650.1		thiol peroxidase	Streptococcus thermophilus LMG	
		55738928	gb	AAV62569.1		thiol peroxidase	Streptococcus thermophilus	
		116101062	gb	ABJ66208.1		thiol peroxidase (atypical 2-Cys peroxiredoxin)	Streptococcus thermophilus LMD-9	
25	9.59E-11	87307358	ref	ZP_01089503.1		probable thiol peroxidase	Blastopirellula marina DSM 3645	FGPEGLSVPSVDTSCVATQTRTVSLDALNRFCELMLLARGNVT
		87290098	gb	EAG81987.1		probable thiol peroxidase	Blastopirellula marina DSM 3645	
26	1.46E-16	83721283	ref	YP_441706.1		thiol peroxidase	Burkholderia thailandensis E264	KVTNIVPSLDTPTCATSTRVVSADAAATRFYGVNVTLDGLTARA
		83655108	gb	ABC39171.1		thiol peroxidase	Burkholderia thailandensis E264	
27	3.32E-13	157149716	ref	YP_001451072.1		thioredoxin peroxidase	Streptococcus gordonii str. Challis	SIIPSIDTGVCSQTQRTVSVDAQGWCEGENAEWHLLARATVT
		1171956	sp	P42366		TPX_STRGC Probable thiol peroxidase	Streptococcus gordonii str. Challis	
		310634	gb	AA71948.1		20 kDa protein	Streptococcus gordonii str. Challis	
		157074510	gb	ABY09193.1		thioredoxin peroxidase	Streptococcus gordonii str. Challis	
28	2.46E-12	148654584	ref	YP_001274789.1		Redoxin domain protein	Roseiflexus sp. RS-1	ERANAFVPSIDTGVCSKQTRTVSADAGRWCVGDDAALAALK
		148566694	gb	ABQ88839.1		thiol peroxidase (atypical 2-Cys peroxiredoxin)	Roseiflexus sp. RS-1	
29	1.12E-14	15924703	ref	NP_372237.1		probable thiol peroxidase	Staphylococcus aureus subsp.	VTLADSVVPSIDTGVCDQQQTREGIVLTAKRWCGLDELRLARA
		15927290	ref	NP_374823.1		hypothetical protein SA1535	Staphylococcus aureus subsp.	
		148268192	ref	YP_001247135.1		Redoxin domain protein	Staphylococcus aureus subsp.	
		150394260	ref	YP_001316935.1		Redoxin domain protein	Staphylococcus aureus subsp.	
		156980030	ref	YP_001442289.1		hypothetical protein SAHV_1699	Staphylococcus aureus subsp.	
		54039748	sp	P99146		TPX_STAAN Probable thiol peroxidase	Staphylococcus aureus	
		54042020	sp	P66954		TPX_STAAM Probable thiol peroxidase	Staphylococcus aureus	
		13701508	dbj	BAB42802.1		SA1535	Staphylococcus aureus subsp.	
		14247485	dbj	BAB57875.1		probable thiol peroxidase	Staphylococcus aureus subsp.	
		147741261	gb	ABQ49559.1		thiol peroxidase (atypical 2-Cys peroxiredoxin)	Staphylococcus aureus subsp.	
		149946712	gb	ABR52648.1		Redoxin domain protein	Staphylococcus aureus subsp.	
		156722165	dbj	BAF78582.1		hypothetical protein	Staphylococcus aureus subsp.	
30	1.43E-16	113869129	ref	YP_727618.1		thiol peroxidase	Ralstonia eutropha H16	NIVPSLDTPVCAQASARTISADAMGRFCRGAIEFKGVLDLAVGTARA
		113827905	emb	CAJ94250.1		thiol peroxidase	Ralstonia eutropha H16	

31	4.77E-15	149181112 ref 148851199 gb			thioredoxin peroxidase thioredoxin peroxidase	ZP_01869612.1 EDL65349.1	Bacillus sp. SG-1 Bacillus sp. SG-1	SVVPSLDTGVCDQAQTRTISADAQRWRWCELRLLARAKVTYVSEGI
32	5.21E-09	29377396 ref 293444863 gb			AhpC/TSA family protein AhpC/TSA family protein	NP_816550.1 AAO82620.1	Enterococcus faecalis V583 Enterococcus faecalis V583	NVTSVVPDIDTRVCSLQTKTISNNEQANNWCEGVEMEEMGLRAR
33	0	152983573 ref 150958731 gb			thiol peroxidase thiol peroxidase	YP_001348064.1 ABR80756.1	Pseudomonas aeruginosa PA7 Pseudomonas aeruginosa PA7	DVTNIFPSVDTPTCATSVRCISADSAQKRFCOEGLENVLAGLAARA
34	2.21E-15	110639903 ref 110282584 gb			thiol peroxidase thiol peroxidase (atypical 2-Cys peroxiredoxin)	YP_680113.1 ABG60770.1	Cytophaga hutchinsonii ATCC 33406 Cytophaga hutchinsonii ATCC 33406	KVTDLSEGTIAPVPSLDTSVCALETRVSKDAMKRFCLKGLSARA
35	8.62E-12	110601201 ref 110548076 gb			Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	ZP_01389398.1 EAT161305.1	Geobacter sp. FRC-32 Geobacter sp. FRC-32	VVTLAPITLASSAVPSLDTVPVCEMETREAAATLPTVSLDAQKRWCV
36	2.07E-09	148377468 ref 148291514 emb			Thiol peroxidase Thiol peroxidase	YP_001256344.1 CAL58900.1	Mycoplasma agalactiae PG2 Mycoplasma agalactiae PG2	LGNEVKAVDLSVPSIDTGTCDIEATVVSYDAQNRWCVGGLLTRA
37	0	157145652 ref 157082857 gb			hypothetical protein CKO_01399 hypothetical protein CKO_01399	YP_001452970.1 ABV12535.1	Citrobacter koseri ATCC BAA-895 Citrobacter koseri ATCC BAA-895	DVTNIFPSIDTGVCAASVRCVSADAAQSRFCYGVETLTKGLAARA
38	5.94E-15	83856669 ref 83850469 gb			thiol peroxidase thiol peroxidase	ZP_00950198.1 EAP88337.1	Croceibacter atlanticus HTC2559 Croceibacter atlanticus HTC2559	KDFEGKNIFPSIDTNTCATSVRCISRDKALKRFIGITFEGLLSRA
39	8.41E-15	119469552 ref 119447087 gb			putative periplasmic thiol peroxidase putative periplasmic thiol peroxidase	ZP_01612456.1 EAW28357.1	Alteromonadales bacterium TW-7 Alteromonadales bacterium TW-7	GVSEAPDFSVVPSLDTGYCSLQTKTVSADAAQKRFCMDMGLLTR
40	2.74E-16	70728213 ref 82682305 sp 68448937 dbj			hypothetical protein SH1212 TPX_STA1HJ Probable thiol peroxidase unnamed protein product	YP_253127.1 Q4L754 BAE04521.1	Staphylococcus haemolyticus Staphylococcus haemolyticus	SVVPSIDTGVCDQQTRTISADAQKRWCGLDELRLARSIVSEGI
41	6.71E-16	158520858 ref 158809684 gb			Redoxin domain protein Redoxin domain protein	YP_001528728.1 ABW66651.1	Desulfococcus oleovorans Hxd3 Desulfococcus oleovorans Hxd3	LLTNIFPSIDTACSMSVPSISLDAHKRFCEGIENALAGLARA
42	1.64E-20	88812455 ref 88790241 gb			thiol peroxidase thiol peroxidase	ZP_01127704.1 EAR21359.1	Nitrococcus mobilis Nb-231 Nitrococcus mobilis Nb-231	TVTNIWPSLDTPTCAASTRAVSAQAQKRFLAGLTARALDAECS
43	0	37526470 ref 36785901 emb			thiol peroxidase Thiol peroxidase (scavengase p20)	NP_929814.1 CAE14953.1	Photothabdus luminescens subsp. Photothabdus luminescens subsp.	NIFFSIDTGVCAASVRCISADAAQSRFCVVTLISGLTARAESDNVI
44	4.42E-16	15615756 ref 11134994 sp 10175817 dbj			thioredoxin peroxidase TPX_BACHD Probable thiol peroxidase thioredoxin peroxidase	NP_244060.1 Q9K873 BAB06913.1	Bacillus halodurans C-125 Bacillus halodurans C-125	SVVPSIDTGVCDQAQTRTAAANLDTVSDAQKRWCCELRLARAET
45	1.55E-15	150007114 ref 149935538 gb			thiol peroxidase thiol peroxidase	YP_001301857.1 ABR42235.1	Parabacteroides distasonis ATCC Parabacteroides distasonis ATCC	KVTVGTEAPNVFPSLDTSVCAASVRAVSKDAHGRFCLKGLLARC
46	1.62E-19	149378494 ref 149357221 gb			thiol peroxidase thiol peroxidase	ZP_01896174.1 EDM45763.1	Marinobacter algicola DG893 Marinobacter algicola DG893	DVTNIVPSVDTPTCATSTRIVSADAAGRFCEGLENVLAGLTSRA
47	0	75179028 ref 75240030 ref 82544228 ref 81245639 gb			COG2077: Peroxiredoxin COG2077: Peroxiredoxin thiol peroxidase thiol peroxidase	ZP_00699046.1 YP_00723991.1 YP_408175.1 ABB66347.1	Shigella boydii BS512 Escherichia coli E110019 Shigella boydii Sb227 Shigella boydii Sb227	DVTNIFPSIDTGVCAASVRCISADAAQSRFCLEGLNVVLAGLAARA
48	1.32E-14	21283385 ref 49485638 ref			hypothetical protein MW1656 putative thiol peroxidase	NP_646473.1 YP_043759.1	Staphylococcus aureus subsp. Staphylococcus aureus subsp.	VTLADSVVPSIDTGVCDQQTRREGIVLTAGKRWCVGLDELRLARA

				YP_186596.1	thiol peroxidase, putative	Staphylococcus aureus subsp.	
				87161687.ref	thiol peroxidase	Staphylococcus aureus subsp.	
				YP_494353.1	hypothetical protein SAOUHSC_01822	Staphylococcus aureus subsp.	
				88195522.ref	thiol peroxidase	Staphylococcus aureus subsp.	
				151221819.ref	possible peroxidase	Staphylococcus aureus subsp.	
				YP_001332641.1	TPX_STAAW Probable thiol peroxidase	Staphylococcus aureus subsp.	
				161509927.ref	TPX_STAAS Probable thiol peroxidase	Staphylococcus aureus subsp.	
				Q8NW51	TPX_STAAC Probable thiol peroxidase	Staphylococcus aureus subsp.	
				60390697.sp	MW1656	Staphylococcus aureus subsp.	
				Q6H61	putative thiol peroxidase	Staphylococcus aureus subsp.	
				21204825.dbj	thiol peroxidase, putative	Staphylococcus aureus subsp.	
				49244981.emb	conserved hypothetical protein	Staphylococcus aureus subsp.	
				57286197.gb	thiol peroxidase	Staphylococcus aureus subsp.	
				ABD22175.1	thiol peroxidase	Staphylococcus aureus subsp.	
				87127661.gb	thiol peroxidase	Staphylococcus aureus subsp.	
				87203080.gb	thiol peroxidase	Staphylococcus aureus subsp.	
				150374619.dbj	possible peroxidase	Staphylococcus aureus subsp.	
				BAF67879.1	possible peroxidase	Staphylococcus aureus subsp.	
				ABX29707.1	TPx	Bacillus licheniformis ATCC 14580	
				YP_092644.1	TPx	Bacillus licheniformis DSM 13	
				AAU41951.1	TPx	Bacillus licheniformis DSM 13	
					Redoxin	Pseudomonas atlantica T6c	
				YP_663290.1	thiol peroxidase (atypical 2-Cys peroxidase)	Pseudomonas atlantica T6c	
				109702316.gb	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Chlorobium phaeobacteroides BS1	
				ABG42236.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Chlorobium phaeobacteroides BS1	
					Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Chlorobium phaeobacteroides BS1	
				79393932.ref	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Tenacibaculum sp. MED152	
				ZP_00531448.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Polaribacter dokdonensis MED152	
				EAM64148.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Moritella sp. PE36	
					Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Moritella sp. PE36	
				ZP_01052002.1	putative thiol peroxidase protein	Spiroplasma citri	
				EAQ41430.1	thiol peroxidase	Hydrogenivirga sp. 128-5-R1-1	
					thiol peroxidase	Hydrogenivirga sp. 128-5-R1-1	
				ZP_01896532.1	putative thiol peroxidase	Clostridium botulinum F str.	
				EDM68801.1	putative thiol peroxidase	Clostridium botulinum F str.	
					putative thiol peroxidase protein	Hahella chejuensis KCTC 2396	
				CAK99161.1	thiol peroxidase	Hahella chejuensis KCTC 2396	
					thiol peroxidase	Hydrogenobaculum sp. Y04AAS1	
				ZP_02179909.1	thiol peroxidase	Hydrogenobaculum sp. Y04AAS1	
				EDP73326.1	putative thiol peroxidase	Aquifex aeolicus VF5	
					putative thiol peroxidase	Aquifex aeolicus VF5	
				ZP_001389866.1	thiol peroxidase	Aquifex aeolicus VF5	
				ABS41317.1	thiol peroxidase	Aquifex aeolicus VF5	
					Peroxiredoxin	Hahella chejuensis KCTC 2396	
				YP_432886.1	Peroxiredoxin	Hahella chejuensis KCTC 2396	
				83632494.gb	Redoxin domain protein	Hydrogenobaculum sp. Y04AAS1	
					Redoxin domain protein	Hydrogenobaculum sp. Y04AAS1	
				ZP_02060160.1	thiol peroxidase	Aquifex aeolicus VF5	
				EDO51560.1	thiol peroxidase	Aquifex aeolicus VF5	
					TPX_AQUAE Probable thiol peroxidase	Aquifex aeolicus VF5	
				NP_213340.1	thiol peroxidase	Aquifex aeolicus VF5	
				O66780	thiol peroxidase	Aquifex aeolicus VF5	
				2983133.gb	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Pseudomonas fluorescens PfO-1	
					thiol peroxidase (atypical 2-Cys peroxidase)	Pseudomonas fluorescens PfO-1	
				YP_348251.1	Redoxin domain protein	Bacillus weihenstephanensis KBAB4	
				77382748.gb	Redoxin domain protein	Bacillus weihenstephanensis KBAB4	
					Redoxin domain protein	Bacillus weihenstephanensis KBAB4	
				YP_001647256.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Sulfurimonas denitrificans DSM 1251	
				ABY45628.1	thiol peroxidase (atypical 2-Cys peroxidase)	Sulfurimonas denitrificans DSM 1251	
					Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Sulfurimonas denitrificans DSM 1251	
				YP_392648.1	thiol peroxidase (atypical 2-Cys peroxidase)	Sulfurimonas denitrificans DSM 1251	
				ABB43413.1			



63	7.13E-14	27468307	ref	NP_764944.1	thioredoxin peroxidase	thioredoxin peroxidase	NP_764944.1	Staphylococcus epidermidis ATCC 5980	SVIPSIDTGVCDSTQTRASAEDGTISVDAQKRWCGLDLRLRLARS
		57867225	ref	YP_188849.1	thiol peroxidase, putative	thiol peroxidase, putative	YP_188849.1	Staphylococcus epidermidis RP62A	
		60390725	sp	Q8CS58	TPX_STAES Probable thiol peroxidase	TPX_STAES Probable thiol peroxidase			
		73919889	sp	Q5HNU2	TPX_STAEQ Probable thiol peroxidase	TPX_STAEQ Probable thiol peroxidase			
		27315853	gb	AAO04988.1	AE016748_222 thioredoxin peroxidase	AE016748_222 thioredoxin peroxidase			
		57637883	gb	AAW54671.1	thiol peroxidase, putative	thiol peroxidase, putative			
64	6.80E-09	15672286	ref	NP_266460.1	thiol peroxidase	thiol peroxidase	NP_266460.1	Lactococcus lactis subsp. lactis	PDFELTSVFPDINTRVCSLQTKKQKNWCGVDITLADLEGLRLARS
		12723169	gb	AAK04402.1	AE006287_8 thiol peroxidase (1.1.1.-)	AE006287_8 thiol peroxidase (1.1.1.-)		Lactococcus lactis subsp. lactis	
65	0	77961681	ref	ZP_00825513.1	COG2077: Peroxiredoxin	COG2077: Peroxiredoxin		Yersinia mollaretii ATCC 43969	SSFVGNIFPISDITGVCAASVRCISSDAQSRFCGVVALAGLTARA
66	7.48E-11	148978181	ref	ZP_01814711.1	Tpx	Tpx	ZP_01814711.1	Vibrio cholerae nonae O139	TVTKQADFKYLFPSVDITPVCSSSTKTSTVDEGVEGVLSGLSARA
		145962603	gb	EDK27879.1	Tpx	Tpx		Vibrio cholerae nonae O139	
67	2.15E-20	145219910	ref	YP_001130619.1	Redoxin domain protein	Redoxin domain protein	YP_001130619.1	Prosthecochloris vibriofomis DSM 11630	VGSEAPNIFPSLDTAVCAASVRCISADAHKRFVCGLDLRLSRA
		145206074	gb	ABP37117.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Prosthecochloris vibriofomis DSM 11630	
68	7.83E-14	116626219	ref	YP_828375.1	Redoxin domain protein	Redoxin domain protein	YP_828375.1	Solibacter usitatus Ellin6076	SVIPSLDTPVCDAGTKGVDTVSMDAQKRWCEAALTAARAGAAAT
		116229381	gb	ABJ88090.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Solibacter usitatus Ellin6076	
69	2.83E-20	82701345	ref	YP_410911.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/Me	Alkyl hydroperoxide reductase/Thiol specific antioxidant/Me	YP_410911.1	Nitrosospora multifomis ATCC 25196	NIVPSLDTPVCAMSTRIIADAMISRFVCGLDRAEAFMLAGITARA
		82409410	gb	ABB73519.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Nitrosospora multifomis ATCC 25196	
70	4.27E-16	115350557	ref	YP_772396.1	Redoxin domain protein	Redoxin domain protein	YP_772396.1	Burkholderia ambifaria AMMD 100	ASFAGKNIIVPSLDTPTCATSTRVVSVDAAATRFVCGVDLNGLTARA
		118701446	ref	ZP_01569507.1	Redoxin	Redoxin		Burkholderia ambifaria MC40-6	
		115280545	gb	ABI86062.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Burkholderia ambifaria AMMD 100	
		118641069	gb	EAV47920.1	Redoxin	Redoxin		Burkholderia ambifaria MC40-6	
71	4.56E-21	144901330	emb	CAM78194.1	thiol peroxidase	thiol peroxidase		Magnetospirillum gyphiswaldense	SVFPSVDTPTCATSVRCASADAHKRFVCGLTLAGLARAIGADGT
72	0	62423048	ref	ZP_00378221.1	COG2077: Peroxiredoxin	COG2077: Peroxiredoxin		Brevibacterium linens BL2	NIFPSVDTGVCAASVRASLENITCVSNDAQARFCVGTLAGLLARS
73	2.05E-18	116517151	ref	YP_816920.1	thiol peroxidase	thiol peroxidase	YP_816920.1	Streptococcus pneumoniae D39	VSFTGKSVVPSIDTGCICSTQTRGLDITVSMDAQKRWCEWHLLAR
		148984084	ref	ZP_01817379.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP3-	
		148986696	ref	ZP_01820129.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP6-	
		148997701	ref	ZP_01825265.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP11-	
		149011488	ref	ZP_01832735.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP19-	
		149021257	ref	ZP_01835503.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP23-	
		161410732	ref	NP_346090.2	thiol peroxidase	thiol peroxidase	NP_346090.2	Streptococcus pneumoniae TIGR4	
		161410742	ref	NP_359088.2	thiol peroxidase	thiol peroxidase	NP_359088.2	Streptococcus pneumoniae R6	
		61248612	sp	P0A4M6	TPX_STRR6 Probable thiol peroxidase	TPX_STRR6 Probable thiol peroxidase		Streptococcus pneumoniae (strain ATCC 49619)	
		122278234	sp	Q04JB8	TPX_STRP2 Probable thiol peroxidase	TPX_STRP2 Probable thiol peroxidase		Streptococcus pneumoniae D39	
		134048489	sp	P0C2J8	TPX1_STRPN Probable thiol peroxidase	TPX1_STRPN Probable thiol peroxidase		Streptococcus pneumoniae	
		1568609	gb	AAO24471.1	18kDa protein	18kDa protein		Streptococcus pneumoniae	
		116077727	gb	ABJ55447.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae D39	
		147756200	gb	EDK63242.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP11-	
		147764478	gb	EDK71409.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP19-	
		147923373	gb	EDK74486.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP3-	
		147925897	gb	EDK76972.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP6-	
		147930358	gb	EDK81342.1	thiol peroxidase	thiol peroxidase		Streptococcus pneumoniae SP23-	
74	3.29E-12	47093445	ref	ZP_00231209.1	thiol peroxidase	thiol peroxidase	ZP_00231209.1	Listeria monocytogenes str. 4b	VGTERKEVTSVPSIDTVCVCSSTQTRITVSDAQKRWCEWLLRLARS
		47096796	ref	ZP_00234378.1	thiol peroxidase	thiol peroxidase		Listeria monocytogenes str. 1/2a	
		153174744	ref	ZP_01930213.1	thiol peroxidase	thiol peroxidase		Listeria monocytogenes ESL N3-165	
		153179614	ref	ZP_01932833.1	thiol peroxidase	thiol peroxidase		Listeria monocytogenes F6900	
		153186113	ref	ZP_01936532.1	thiol peroxidase	thiol peroxidase		Listeria monocytogenes J0161	
		153191019	ref	ZP_01938330.1	thiol peroxidase	thiol peroxidase		Listeria monocytogenes J2818	

	153196781	ref	ZP_01941108.1	thiol peroxidase	Listeria monocytogenes 10403S
	47014829	gb	EAL05780.1	thiol peroxidase	Listeria monocytogenes str. 1/2a
	47018173	gb	EAL08942.1	thiol peroxidase	Listeria monocytogenes str. 4b
	126841394	gb	EBA19282.1	thiol peroxidase	Listeria monocytogenes J0161
	127633664	gb	EBA23072.1	thiol peroxidase	Listeria monocytogenes 10403S
	127765587	gb	EBA25935.1	thiol peroxidase	Listeria monocytogenes J2818
	133729975	gb	EBA31673.1	thiol peroxidase	Listeria monocytogenes FSL N3-165
	133733099	gb	EBA34797.1	thiol peroxidase	Listeria monocytogenes F6900
75	1.00E-18	150006425	ref	YP_001301169.1	putative thiol peroxidase
		149934849	gb	ABR41547.1	putative thiol peroxidase
76	2.79E-18	89891363	ref	ZP_01202869.1	thiol peroxidase, AhpC/TSA family
		89516394	gb	EAS19055.1	thiol peroxidase, AhpC/TSA family
77	3.57E-12	46807814	ref	YP_014203.1	thiol peroxidase
		153167171	ref	ZP_01927452.1	thiol peroxidase
		153202503	ref	ZP_01944039.1	thiol peroxidase
		67461795	sp	Q71Z84	TPX_LISMF Probable thiol peroxidase
		46881083	gb	AA104380.1	thiol peroxidase
		133727105	gb	EBA28803.1	thiol peroxidase
		133735278	gb	EBA36876.1	thiol peroxidase
78	0	120403953	ref	YP_953782.1	thiol peroxidase
		119956771	gb	ABM113776.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)
79	1.28E-18	111657856	ref	ZP_01408570.1	hypothetical protein SpneT_02000953
		4193357	gb	AAD09977.1	putative hydrophobic transmembrane protein; Psad
		14973141	gb	AAK75730.1	thiol peroxidase
		154593155	gb	AA100299.1	Thioredoxin-linked thiol peroxidase
80	7.67E-16	94311999	ref	YP_585209.1	Antioxidant Tpx
		93355851	gb	ABF09940.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)
81	1.13E-15	91792718	ref	YP_562369.1	Antioxidant Tpx
		91714720	gb	ABE54846.1	Antioxidant Tpx
82	0	15597728	ref	NP_251222.1	thiol peroxidase
		84320765	ref	ZP_00969134.1	COG2077: Peroxiredoxin
		84326859	ref	ZP_00974883.1	COG2077: Peroxiredoxin
		107101979	ref	ZP_01365897.1	hypothetical protein PaerPA_01003026
		116050476	ref	YP_790705.1	thiol peroxidase
		11134977	sp	P57688	TPX_PSEAE Probable thiol peroxidase
		9948589	gb	AA605920.1	AE004681.2 thiol peroxidase
		115585697	gb	ABJ11712.1	thiol peroxidase
		126167458	gb	EAZ52969.1	thiol peroxidase
		126194341	gb	EAZ58404.1	thiol peroxidase
83	1.47E-12	68055940	ref	ZP_00540078.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/ Maf
		68007464	gb	EAM8672.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/ Maf
84	1.71E-17	154495139	ref	ZP_02034144.1	hypothetical protein PARMER_04186
		154085689	gb	EDN84734.1	hypothetical protein PARMER_04186
85	5.00E-15	73662361	ref	YP_301142.1	putative peroxiredoxin
		82582306	sp	Q49YE4	TPX_STAS1 Probable thiol peroxidase
		72494876	dbj	BAE18197.1	putative peroxiredoxin

86	9.36E-16	152977007	ref	YP_001376524.1	Redoxin domain protein	Redoxin domain protein	YP_001376524.1	152977007	ref	Bacillus cereus subsp. cytotoxis	SVVPSIDTGYCDAQTRAGIENTTISVDAQKRWCVWTELRLARA
		152025759	gb	ABS23529.1	Redoxin domain protein	Redoxin domain protein				Bacillus cereus subsp. cytotoxis	
87	4.64E-18	148379504	ref	YP_001253045.1	thiol peroxidase	thiol peroxidase	YP_001253045.1	148379504	ref	Clostridium botulinum A str. ATCC	EGNELKSVVPSLDTEVCDLETRTISMDAQARWCGVDELGLLTRA
		153933469	ref	YP_001382892.1	putative thiol peroxidase	putative thiol peroxidase	YP_001382892.1	153933469	ref	Clostridium botulinum A str. ATCC	
		153936039	ref	YP_001386458.1	putative thiol peroxidase	putative thiol peroxidase	YP_001386458.1	153936039	ref	Clostridium botulinum A str. Hall	
		148287988	emb	CAL82055.1	thiol peroxidase	thiol peroxidase	CAL82055.1	148287988	emb	Clostridium botulinum A str. ATCC	
		152929512	gb	ABS35012.1	putative thiol peroxidase	putative thiol peroxidase	ABS35012.1	152929512	gb	Clostridium botulinum A str. ATCC	
		152931953	gb	ABS37452.1	putative thiol peroxidase	putative thiol peroxidase	ABS37452.1	152931953	gb	Clostridium botulinum A str. Hall	
88	7.29E-20	152991403	ref	YP_001357125.1	thiol peroxidase	thiol peroxidase	YP_001357125.1	152991403	ref	Nitratiraptor sp. SB155-2	VVVPISLTPVCATETRGVDVSMDSKRFCEGVENLLKGLSARA
		151423264	dbj	BAF70768.1	thiol peroxidase	thiol peroxidase	BAF70768.1	151423264	dbj	Nitratiraptor sp. SB155-2	
89	0	53728819	ref	ZP_00134953.2	COG2077: Peroxiredoxin	COG2077: Peroxiredoxin	ZP_00134953.2	53728819	ref	Acinobacillus pleuropneumoniae	NIFPSIDTGVCATSVRCISADAAQARFCEGIENVGVDLAGLTSRS
		126203953	ref	YP_001054178.1	putative thiol peroxidase	putative thiol peroxidase	YP_001054178.1	126203953	ref	Acinobacillus pleuropneumoniae L20	
		165976917	ref	YP_001652510.1	probable thiol peroxidase	probable thiol peroxidase	YP_001652510.1	165976917	ref	Acinobacillus pleuropneumoniae	
		126097745	gb	ABN74573.1	putative thiol peroxidase	putative thiol peroxidase	ABN74573.1	126097745	gb	Acinobacillus pleuropneumoniae L20	
		165877018	gb	ABY70066.1	probable thiol peroxidase	probable thiol peroxidase	ABY70066.1	165877018	gb	Acinobacillus pleuropneumoniae	
90	2.07E-11	161613859	ref	YP_001587824.1	hypothetical protein SPAB_01594	hypothetical protein SPAB_01594	YP_001587824.1	161613859	ref	Salmonella enterica subsp. enterica	LQGEHAKFGILAEIGVVPSLDTPVCEWQVKVLSMDAQRFFVVT
		161363223	gb	ABX66891.1	hypothetical protein SPAB_01594	hypothetical protein SPAB_01594	ABX66891.1	161363223	gb	Salmonella enterica subsp. enterica	
91	6.89E-21	146299870	ref	YP_001194461.1	Redoxin domain protein	Redoxin domain protein	YP_001194461.1	146299870	ref	Flavobacterium johnsoniae UW101	NIFPSVDTGTTCATSVRSGLNTCISRDAQKRFQVVDLGLHSRA
		146154288	gb	ABQ05142.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	thiol peroxidase (atypical 2-Cys peroxiredoxin)	ABQ05142.1	146154288	gb	Flavobacterium johnsoniae UW101	
92	7.73E-17	146321246	ref	YP_001200957.1	thiol peroxidase	thiol peroxidase	YP_001200957.1	146321246	ref	Streptococcus suis 98HAH33	PVTSVPSIDTGTICDTQTRVTSADAAQKRWAGLEDAEWNLLARA
		145892052	gb	ABP92557.1	Peroxiredoxin	Peroxiredoxin	ABP92557.1	145892052	gb	Streptococcus suis 98HAH33	
93	1.65E-21	117618015	ref	YP_855170.1	thiol peroxidase	thiol peroxidase	YP_855170.1	117618015	ref	Aeromonas hydrophilla subsp.	VSFAGQNIFFSVDIPTCATSVRCISADAGSRFCGLDLVGLAARA
		117559422	gb	ABK36370.1	thiol peroxidase	thiol peroxidase	ABK36370.1	117559422	gb	Aeromonas hydrophilla subsp.	
94	0	145295228	ref	YP_001138049.1	hypothetical protein cgr_1169	hypothetical protein cgr_1169	YP_001138049.1	145295228	ref	Corynebacterium glutamicum R	NIFPSVDTGYCATSVRASLENITCISKDALGRFQNVTLKGLARS
		24212515	gb	Q8NRG3	TPX_CORGL Probable thiol peroxidase	TPX_CORGL Probable thiol peroxidase	Q8NRG3	24212515	gb	Corynebacterium glutamicum ATCC	
		21323853	dbj	BAB98479.1	Peroxiredoxin	Peroxiredoxin	BAB98479.1	21323853	dbj	Corynebacterium glutamicum R	
		140945148	dbj	BAF54147.1	hypothetical protein	hypothetical protein	BAF54147.1	140945148	dbj	Corynebacterium glutamicum R	
95	1.85E-12	163788159	ref	ZP_02182605.1	Peroxiredoxin	Peroxiredoxin	ZP_02182605.1	163788159	ref	Flavobacteriales bacterium ALC-1	NVTNVFPSVDTGTCAOSIRCISKDAMARFCFETLLSRCQVAEIA
		159876479	gb	EDP70537.1	Peroxiredoxin	Peroxiredoxin	EDP70537.1	159876479	gb	Flavobacteriales bacterium ALC-1	
96	8.42E-11	116327207	ref	YP_796927.1	Peroxiredoxin	Peroxiredoxin	YP_796927.1	116327207	ref	Leptospira borgpetersenii serovar	QVTVAVPSWDTSVCALEITREKAAGLIISGDAMKRFCLKGLSARA
		116332130	ref	YP_801848.1	Peroxiredoxin	Peroxiredoxin	YP_801848.1	116332130	ref	Leptospira borgpetersenii serovar	
		116119951	gb	ABJ77994.1	Peroxiredoxin	Peroxiredoxin	ABJ77994.1	116119951	gb	Leptospira borgpetersenii serovar	
		116125819	gb	ABJ77090.1	Peroxiredoxin	Peroxiredoxin	ABJ77090.1	116125819	gb	Leptospira borgpetersenii serovar	
97	8.96E-20	152995291	ref	YP_001340126.1	Redoxin domain protein	Redoxin domain protein	YP_001340126.1	152995291	ref	Marinomonas sp. MWYL1	TVTNIFPSVDTPTCATSVRESAASLCSADAAAARFCLTGLLSRA
		150836215	gb	ABR70191.1	Redoxin domain protein	Redoxin domain protein	ABR70191.1	150836215	gb	Marinomonas sp. MWYL1	
98	4.31E-11	95930268	ref	ZP_01313006.1	Antioxidant Tpx	Antioxidant Tpx	ZP_01313006.1	95930268	ref	Desulfuromonas acetoxidans DSM	DSAKGKAVVPSIDTGVCDTMITRTISVDAQGRWCELIKLLARAETV
		95133731	gb	EAT15392.1	Antioxidant Tpx	Antioxidant Tpx	EAT15392.1	95133731	gb	Desulfuromonas acetoxidans DSM	
99	4.16E-18	160876278	ref	YP_001555594.1	Redoxin domain protein	Redoxin domain protein	YP_001555594.1	160876278	ref	Shewanella baltica OS195	TVTSAVPSLDTGVCAEQTKTISADAAQKRFCDYGLLARAIDAEGK
		160861800	gb	ABX50334.1	Redoxin domain protein	Redoxin domain protein	ABX50334.1	160861800	gb	Shewanella baltica OS195	
100	3.69E-19	32267317	ref	NP_861349.1	thiol peroxidase	thiol peroxidase	NP_861349.1	32267317	ref	Helicobacter hepaticus ATCC 51449	KL TNVPSLDTGVCAEQTKTISADAAQKRFCDYGLLARAIDAEGK
		32263370	gb	AAF78415.1	thiol peroxidase	thiol peroxidase	AAF78415.1	32263370	gb	Helicobacter hepaticus ATCC 51449	
101	8.59E-19	88713479	ref	ZP_01107579.1	thiol peroxidase	thiol peroxidase	ZP_01107579.1	88713479	ref	Flavobacteriales bacterium	TVTNIFPSIDTGTCAASVREAAELCISKDAQTRFCLQGLLSRS
		88703007	gb	EAR00245.1	thiol peroxidase	thiol peroxidase	EAR00245.1	88703007	gb	Flavobacteriales bacterium	

102	3.03E-14	28210514 ref	NP_781458.1	putative thiol peroxidase	Clostridium tetani E88	SVTVGNELKSAIPSLDTPVCDLETKTISMDAQVRWCELGLLARA
103		28202951 gb	AAO35395.1	putative thiol peroxidase	Clostridium tetani E88	
	4.35E-16	99912772 ref	ZP_01319470.1	hypothetical protein Bpset_03001036	Burkholderia pseudomallei 1655	KVTNIVPSLDTPVCAAS TRVVSADAATRFYGVNVTLDGLAARA
104	1.76E-11	39995461 ref	NP_951412.1	thiol peroxidase	Geobacter sulfurreducens PCA	FGAAIKSAVPSLDTPVCAE TRTISLDAQKRWCVVTEMLLSRS
		39982224 gb	AAR33685.1	thiol peroxidase	Geobacter sulfurreducens PCA	
105	5.80E-18	91785251 ref	YP_560457.1	Putative thiol peroxidase_Tpx	Burkholderia xenovorans LB400	NIVPSLDTPCATSTRVVSGBAASRFCEGIENVGVDLTGLTARA
		91689205 gb	ABE32405.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Burkholderia xenovorans LB400	
106	2.15E-11	16765010 ref	NP_460625.1	putative thiol peroxidase	Salmonella typhimurium LT2	LGQEHAKPGILAEIGVVPVSLDTPVCEWQVKVLSMDAQAARFIVT
		16420193 gb	AAL20584.1	putative thiol peroxidase	Salmonella typhimurium LT2	
107	0	74316192 ref	YP_313932.1	thiol peroxidase-scavengase P20 oxidoreductase protein	Thiobacillus denitrificans ATCC	AVTNIVPSLDTPVYCATSTKIISADAMSRRFCRGAEFMLAGVTARA
		74055687 gb	AAZ96127.1	thiol peroxidase-scavengase P20 oxidoreductase protein	Thiobacillus denitrificans ATCC	
108	2.13E-15	107021678 ref	YP_620005.1	Redoxin	Burkholderia cenocepacia AU 1054	ASFAGKNIAPSLDTPTCATSTRVVSADAATRFCEGVDLNGLTARA
		105891867 gb	ABF75032.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Burkholderia cenocepacia AU 1054	
109	4.45E-13	401698 sp	P31308	TPX_STRSA Probable thiol peroxidase	Streptococcus sanguinis	SIIPSIDTGVCGSTQTRTVSVVDAGGKWCEGIEINAEWHLLARATVT
		153827 gb	AAC98427.1	20-kDa protein	Streptococcus sanguinis	
110	0	26990298 ref	NP_745723.1	thiol peroxidase	Pseudomonas putida KT2440	AGAQNIFPVSVDTPTCATSVRCISADAGARFCGLDLAAGLAARA
		24985251 gb	AAN69187.1	AEO16553_2 thiol peroxidase	Pseudomonas putida KT2440	
111	0	60594471 pdb	1XVQ	A Chain A, Crystal Structure Of Thiol Peroxidase From Myco	Mycobacterium tuberculosis	NIFPVSVDTPVYCATSVRLVSKDAQKRFCEGIENVGVTMAGILLARA
112	5.09E-17	163726135 ref	ZP_02133651.1	Redoxin domain protein	Desulfatibacillum alkenivorans AK-01	PGFTLTNIFPSIDTGVCAMSVRCVSMDALGRFCGLDLAAGLFARS
		161400527 gb	EDQ24779.1	Redoxin domain protein	Desulfatibacillum alkenivorans AK-01	
113	9.31E-16	88796646 ref	ZP_01112306.1	Peroxiredoxin	Alteromonas macleodii 'Deep	NIFPSIDTGTCAMSVRCVVSADAAGRFCEGIENVGVTLTGLLSRS
		88772030 gb	EAR03335.1	Peroxiredoxin	Alteromonas macleodii 'Deep	
114	1.35E-19	15640841 ref	NP_230472.1	tagD protein	Vibrio cholerae O1 biovar eltor str.	TVTSIFPSIDTPVSKSVKCVSADAMSRRFCVAVNVTLRGLAARA
		121585671 ref	ZP_01675466.1	tagD protein	Vibrio cholerae 2740-80	
		153220677 ref	ZP_01951788.1	tagD protein	Vibrio cholerae MAK 757	
		153822028 ref	ZP_01974695.1	tagD protein	Vibrio cholerae B33	
		12644011 sp	P39167	TPX_VIBCH Probable thiol peroxidase (Protein tagD)		
		13377548 gb	AAK20781.1	AF325734_7 toxR-activated gene D protein		
		9655275 gb	AAF93987.1	tagD protein	Vibrio cholerae	
		121550034 gb	EAX60050.1	tagD protein	Vibrio cholerae O1 biovar eltor str.	
		124120241 gb	EAY38984.1	tagD protein	Vibrio cholerae 2740-80	
		125619704 gb	EAZ48231.1	tagD protein	Vibrio cholerae MAK 757	
		126520422 gb	EAZ77645.1	tagD protein	Vibrio cholerae MO10	
					Vibrio cholerae B33	
115	0	16122566 ref	NP_405879.1	thiol peroxidase	Yersinia pestis CO92	SSFAGKNIFPSIDTGVCAASVRCISSDAQSRFCGVALAGLTARA
		51596585 ref	YP_070776.1	thiol peroxidase	Yersinia pseudotuberculosis IP	
		108907686 ref	YP_651602.1	thiol peroxidase	Yersinia pestis Antiqua	
		108811964 ref	YP_647731.1	thiol peroxidase	Yersinia pestis Nepal516	
		145598106 ref	YP_001162182.1	thiol peroxidase	Yersinia pestis Pestoides F	
		149365746 ref	ZP_01887781.1	thiol peroxidase	Yersinia pestis CA88-4125	
		153950251 ref	YP_001400770.1	thiol peroxidase	Yersinia pseudotuberculosis IP	
		161484811 ref	NP_669305.2	thiol peroxidase	Yersinia pestis KIM	
		161511374 ref	NP_993461.2	thiol peroxidase	Yersinia pestis biovar Microtus str.	
		165926488 ref	ZP_02222320.1	thiol peroxidase	Yersinia pestis biovar Orientalis str.	
		165938567 ref	ZP_02227123.1	thiol peroxidase	Yersinia pestis biovar Orientalis str.	

166010740	ref	ZP_02231638.1	thiol peroxidase	Yersinia pestis biovar Antiqua str.	Yersinia pestis biovar Antiqua str.
24212520	sp	Q8ZE42	TPX_YERPE Probable thiol peroxidase	Yersinia pestis	
51583867	emb	CAH21499.1	thiol peroxidase	Yersinia pseudotuberculosis IP	
108775612	gb	ABG18131.1	thiol peroxidase (atypical 2-Cys peroxidoredoxin)	Yersinia pestis Nepal516	
108773599	gb	ABG13657.1	thiol peroxidase (atypical 2-Cys peroxidoredoxin)	Yersinia pestis Antiqua	
115343045	emb	CAL20970.1	thiol peroxidase	Yersinia pestis CO82	
145203802	gb	ABP39209.1	thiol peroxidase (atypical 2-Cys peroxidoredoxin)	Yersinia pestis Pestiloides F	
149292159	gb	EDM42233.1	thiol peroxidase	Yersinia pestis CA88-4125	
152961746	gb	ABS49207.1	thiol peroxidase	Yersinia pseudotuberculosis IP	
165913441	gb	EDR32062.1	thiol peroxidase	Yersinia pestis biovar Orientalis str.	
165921709	gb	EDR38906.1	thiol peroxidase	Yersinia pestis biovar Orientalis str.	
165990442	gb	EDR42743.1	thiol peroxidase	Yersinia pestis biovar Antiqua str.	
116	0	86142622	ref	Flavobacterium sp. MED217	GNTNIFPSVDTGVCAASVRCISRDAAQRFCGLENVFAGLHSRV
		85830654	gb	Leeuwenhoekella blandensis	
117	0	16760205	ref	Salmonella enterica subsp. enterica	PVTNIFPSIDTGVCAASVRCVSADAAQSRFCYGYEIVLKGGLAARA
		29142026	ref	Salmonella enterica subsp. enterica	
		24212519	sp	Salmonella enterica subsp. enterica	
		Q8Z7A8	TFX_SALTI Probable thiol peroxidase	Salmonella enterica subsp. enterica	
		25311474	pir	Salmonella enterica subsp. enterica	
		16502500	emb	Salmonella enterica subsp. enterica	
		29137655	gb	Salmonella enterica subsp. enterica	
118	0	153885870	ref	Raistonia pickettii T2D	VGADLKNIVPSLDTPVCAATSTRISADAAAGRCFVGVDLAGVTARA
		15157792	gb	Raistonia pickettii T2D	
119	3.88E-22	86157255	ref	Anaeromyxobacter dehalogenans	VGAKAPDVNIVPSLDTAVCATSTRVVSADAKRFCLAGLTARA
		85773766	gb	Anaeromyxobacter dehalogenans	
120	1.86E-11	78776829	ref	Sulfitrimonas denitrificans DSM 1251	KVTATAIGTVTVPSLDTDTCAAETRVVSMDSERFCLQGLSARA
		78497369	gb	Sulfitrimonas denitrificans DSM 1251	
121	1.04E-19	88603028	ref	Polaribacter igensis Z3-P	NIFPSLDTGTCAASVRSAAELKCIKDAQARFCGKTLYLH5RA
		88781886	gb	Polaribacter igensis Z3-P	
122	0	77953048	ref	Yersinia bercovieri ATCC 43970	PVTNIFPSIDTGVCAASVRCISSDAQSRFCRGADFKLAGLTARA
123	6.98E-15	138896327	ref	Geobacillus thermodenitrificans	MMANVTEVTSVPSLDTGVCDAAQIRTISVDQAQRWCELRLRAY
		134267840	gb	Geobacillus thermodenitrificans	
124	7.76E-15	84393654	ref	Vibrio splendidus 12B01	NIFPSIDTATCATSVRCISADAAAGRFCEGIEGYLASELTTTRAVVT
		84375722	gb	Vibrio splendidus 12B01	
125	1.24E-14	152991671	ref	Sulfurovum sp. NBC37-1	VGGEGKVAVPSLDTGVGDAAEIRGLDITVSMIDAAARWCLAGVLAFLAF
		151423532	dbj	Sulfurovum sp. NBC37-1	
126	2.66E-14	118047272	ref	Chloroflexus aggregans DSM 9485	EVTTSVPSLDTGVCSKQITTAARLAGQATVSADAAQARWCGGMATC
		117996196	gb	Chloroflexus aggregans DSM 9485	
127	1.47E-16	77405840	ref	Streptococcus agalactiae H36B	KDFEGKSVVPSIDTGVCSKQIRTVSMIDAKRWCGLDEWHLLTR
		77175550	gb	Streptococcus agalactiae H36B	
128	2.76E-19	21673584	ref	Chlorobium tepidum TLS	NIFPSLDTAVCAASVRCISADAAQGRFCGLTLKGLLSRALYAEQV
		25091430	sp	Chlorobium tepidum TLS	
		21646697	gb	Chlorobium tepidum TLS	
129	0	115375795	ref	Stigmatella aurantiaca DW4/3-1	NIFPSIDTGVCATSVRGVTVNVSMDALKRFFCLTGLYSRAIGQEPN
		115367183	gb	Stigmatella aurantiaca DW4/3-1	

130	5.66E-17	84356766 ref	ZP_00981602.1	COG2077: Peroxiredoxin	Burkholderia cenocepacia PC184	ASFAGKNIIVPSLDTPTTCATSTRVVSADAATRFQGVDLNGLTARA
		1166883624 ref	YP_834247.1	Redoxin domain protein	Burkholderia cenocepacia HI2424	
		118714030 ref	ZP_01566591.1	Redoxin	Burkholderia cenocepacia MCO-3	
		116646713 gb	ABK07354.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Burkholderia cenocepacia HI2424	
		118648445 gb	EAV56249.1	Redoxin	Burkholderia cenocepacia MCO-3	
		124871163 gb	EAY62879.1	Alkyl hydroperoxide reductase	Burkholderia cenocepacia PC184	
131	9.04E-21	74312309 ref	YP_310728.1	thiol peroxidase	Shigella sonnei Ss046	DVTNIFPSIDTDVCAASVRCISADAQSRFCEGLNNVLKGLAARA
		73855786 gb	AAZ88493.1	thiol peroxidase	Shigella sonnei Ss046	
132	0	15602685 ref	NP_245757.1	Tpx	Pasteurella multocida subsp.	TVSAKNIFPSIDTGICATSVRAQAQRFCEGLENVGVDLAGLTARA
		13431941 sp	P57880	TPX_PASMU Probable thiol peroxidase	Pasteurella multocida subsp.	
		12721127 gb	AAK02904.1	Tpx	Pasteurella multocida subsp.	
133	1.52E-16	22537289 ref	NP_688140.1	thiol peroxidase	Streptococcus agalactiae 2603/VR	KDFEGKSVVPSIDTGICSKQTRTVSMDAQRWCVGLDEWHLLTR
		76786793 ref	YP_329835.1	thiol peroxidase	Streptococcus agalactiae A909	
		77410567 ref	ZP_00786928.1	thiol peroxidase	Streptococcus agalactiae CJB111	
		7413023 ref	ZP_00789225.1	thiol peroxidase	Streptococcus agalactiae 515	
		60390726 sp	Q8DZH0	TPX_STRAS Probable thiol peroxidase	Streptococcus agalactiae 2603/VR	
		22534158 gb	AAN0013.1	AE014243_19 thiol peroxidase	Streptococcus agalactiae A909	
		76661850 gb	ABA44434.1	thiol peroxidase	Streptococcus agalactiae 515	
		77160921 gb	EA072030.1	thiol peroxidase	Streptococcus agalactiae CJB111	
		77163515 gb	EA074465.1	thiol peroxidase	Streptococcus agalactiae CJB111	
134	3.86E-12	94987038 ref	YP_594971.1	Peroxiredoxin	Lawsonia intracellularis PHE/IMN1-00	SAVPSLDTGVCDJETQTSQDAQARWCVSAVEITELRLARAVVD
		94731287 emb	CAJ54650.1	Peroxiredoxin	Lawsonia intracellularis PHE/IMN1-00	
135	0	119860085 ref	ZP_01641490.1	Redoxin	Pseudomonas putida W619	QVTNIFPSVDPTTCATSVRCISADAQAQRFCEGLENVLAGLAARA
		119813595 gb	EAX16366.1	Redoxin	Pseudomonas putida W619	
136	2.75E-16	32473192 ref	NP_866186.1	probable thiol peroxidase	Rhodopirellula baltica SH 1	ELAVGQSVPSLDTPTTCATQTKTVSRDQAQRFCEKLLSRAEVT
		32397871 emb	CAD73872.1	probable thiol peroxidase	Rhodopirellula baltica SH 1	
137	1.58E-13	116749769 ref	YP_846456.1	Redoxin domain protein	Syntrophobacter fumaroxidans	AVTKGAPLTSVPSLDTFVCDMETRTVSMDAQKRWCELLRAR
		116698833 gb	ABK18021.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Syntrophobacter fumaroxidans	
138	4.97E-11	24213562 ref	NP_711043.1	thiol peroxidase	Leptospira interrogans serovar Lai	VAVPSLDTVCGALEIKKAAAGIGTVISGDAMGRFCKLGLSARA
		45658599 ref	YP_002685.1	thiol peroxidase	Leptospira interrogans serovar	
		73919883 sp	Q7ZNR4	TPX_LEPIC Probable thiol peroxidase	Leptospira interrogans serovar Lai	
		73919884 sp	Q8F7T2	TPX_LEPIN Probable thiol peroxidase	Leptospira interrogans serovar	
		24194350 gb	AAN48061.1	AE011271_1 thiol peroxidase	Leptospira interrogans serovar	
		45601843 gb	AAS71322.1	thiol peroxidase	Leptospira interrogans serovar	
139	1.51E-16	77409767 ref	ZP_00786422.1	thiol peroxidase	Streptococcus agalactiae COH1	KDFEGKSVVPSIDTGICSKQTRTVSMDAQRWCVGLDEWHLLTR
		77171627 gb	EA07484.1	thiol peroxidase	Streptococcus agalactiae COH1	
140	1.50E-19	150025644 ref	YP_001296470.1	Thiol peroxidase	Flavobacterium psychrophilum	SVTNIFPSVDGTGTCASVRSRGLENTCISRDAQKRFCLAGLHSRV
		149772185 emb	CAL43661.1	Thiol peroxidase	Flavobacterium psychrophilum	
141	8.11E-20	153608277 ref	ZP_01960945.1	hypothetical protein BACCAC_02565	Bacteroides caccae ATCC 43185	NIFPSLDTSVCATSVRAISKDAHGRFCEGIEINVGYRLAGLLARA
		149129180 gb	EDM20396.1	hypothetical protein BACCAC_02565	Bacteroides caccae ATCC 43185	
142	1.30E-19	125622459 gb	EAZ50779.1	tagD protein	Vibrio cholerae V51	TVTSIFPSIDTPVCSKSVKCVKADAMSRFCVAVNVTLRGLAARA
143	2.87E-10	59714072 ref	YP_206847.1	TagD-like protein/thioperoxidase	Vibrio fischeri ES114	SVTYTYPVSDTPVCSKSLVCISADATNFRFCRSENFTRGLAARS
		59482320 gb	AAW87959.1	TagD-like protein/thioperoxidase	Vibrio fischeri ES114	

144	0	50642076	ref	YP_055303.1	thiol peroxidase				Propionibacterium acnes	NIFPSVDTGYCATSVREKAAGLCVSRDAQARFCGVTMQHLLAR/
		50839678	gb	AA182345.1	thiol peroxidase				Propionibacterium acnes	
145	0	34541358	ref	NP_905837.1	thiol peroxidase				Porphyromonas gingivalis W83	NIFPSIDTGVCAASVRCLSKDAQARFCGLDLKGLLARAFAAIAA
		34397675	gb	AAQ66736.1	thiol peroxidase				Porphyromonas gingivalis W83	
146	1.69E-11	16760220	ref	NP_455837.1	putative thiol peroxidase				Salmonella enterica subsp. enterica	LQGEHAKPGIAEGVVVPSLDTVPCEVQVKVLSMDAQRFFIVT
		25512703	pir	AF0661	probable thiol peroxidase	STY1397			Salmonella enterica subsp. enterica	
		16502515	emb	CAD01663.1	putative thiol peroxidase				Salmonella enterica subsp. enterica	
147	3.05E-12	16803623	ref	NP_465108.1	hypothetical protein lmo1583				Listeria monocytogenes EGD-e	VGTERKEVTSVPSIDTSCVSTQTRTISVDAQKKWCCELRLARS
		24212518	sp	Q8Y6U8	TPX_LISMO	Probable thiol peroxidase			Listeria monocytogenes	
		16411012	emb	CAC99661.1	lmo1583				Listeria monocytogenes	
148	0	11846343	ref	YP_881959.1	thiol peroxidase				Mycobacterium avium 104	NIFPSIDTVCATSVRAGAGATNYSKDAQARFCGVTMAGLLARA
		118164700	gb	ABK65597.1	thiol peroxidase				Mycobacterium avium 104	
149	5.04E-19	86132173	ref	ZP_01060768.1	thiol peroxidase				Cellulophaga sp. MED134	NIFPSVDTGYCAQSVRSSAENTCISRDAQARFCGVTDFGLHSRA
		85617092	gb	EAQ38275.1	thiol peroxidase				Dokdonia donghaensis MED134	
150	4.75E-14	114563967	ref	YP_751481.1	Redoxin domain protein				Shewanella frigidimarina NCIMB 400	PSFAGESAVPSIDTGVCAQLTKTISEDQAKRFCDRGLLARS/LVT
		114333260	gb	ABI72642.1	Redoxin domain protein				Shewanella frigidimarina NCIMB 400	
151	2.37E-19	163783283	ref	ZP_02178276.1	thiol peroxidase				Hydrogenivirga sp. 128-5-R1-1	TVTGGAQGKITVPSLIDTVPCEIETKVVSMDAEKRFCLKGILARA
		159881391	gb	EDP74902.1	thiol peroxidase				Hydrogenivirga sp. 128-5-R1-1	
152	0	146282533	ref	YP_001172686.1	thiol peroxidase				Pseudomonas stutzeri A1501	EVTNIFPSVDTPTCATSVRCSISADADAQKRFRCGAPELLAGVAARA
		145570738	gb	ABP79844.1	thiol peroxidase				Pseudomonas stutzeri A1501	
153	1.06E-16	57241254	ref	ZP_00369201.1	thiol peroxidase				Campylobacter lari RM2100	ISVPSLIDTVPVCATEARVVSMDBAMGRFCLEGILARAEVTEFFGQ
		57018175	gb	EAL54950.1	thiol peroxidase				Campylobacter lari RM2100	
154	0	161503231	ref	YP_001570343.1	hypothetical protein SARI_01299				Salmonella enterica subsp. arizonae	PVTNIFPSIDTGVCAASVRCVSADADAQSRFCYGYEITLKGLAARA
		160864578	gb	ABX21201.1	hypothetical protein SARI_01299				Salmonella enterica subsp. arizonae	
155	2.41E-15	86148258	ref	ZP_01066554.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma				Vibrio sp. MED222	NIFPSIDTATCATSVRCSISADAAGRFCGIEGVL SGLTTRAVT
		85633954	gb	EAQ52116.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma				Vibrio sp. MED222	
156	8.94E-13	57167777	ref	ZP_00366917.1	thiol peroxidase				Campylobacter coli RM2228	EVGADLSLPSLIDTVPVCATEARNGAEVVMGRFCLEGLLARA/EV
		57020899	gb	EAL57563.1	thiol peroxidase				Campylobacter coli RM2228	
157	0	123442374	ref	YP_001006353.1	thiol peroxidase				Yersinia enterocolitica subsp.	PVTSSFYGKNIFPSIDTGVCAASVRCISSDAQSRFCLAGLARA
		122089335	emb	CAL12183.1	thiol peroxidase				Yersinia enterocolitica subsp.	
158	0	148547406	ref	YP_001267508.1	Redoxin domain protein				Pseudomonas putida F1	AGAQAPNIFPSVDIPTCATSVRCSISADADAQARFCGLDLAAGLARA
		148511464	gb	ABQ78324.1	thiol peroxidase (atypical 2-Cys peroxidoredoxin)				Pseudomonas putida F1	
159	1.50E-15	154687070	ref	YP_001422231.1	Tpx				Bacillus amyloliquefaciens FZB42	GGAVTLKVTSVPSIDTGVGDAQTRTISADAQARWCCELRLARS
		154352921	gb	ABS75000.1	Tpx				Bacillus amyloliquefaciens FZB42	
160	0	110598477	ref	ZP_01386748.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma				Chlorobium ferrooxidans DSM 13031	NAAETINIFPSLIDTVPVCAASVRCISADAHKRFRCVTLKGLLSRA
		110339927	gb	EAT58431.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma				Chlorobium ferrooxidans DSM 13031	
161	3.15E-14	126651361	ref	ZP_01723568.1	thiol peroxidase (superoxide-inducible protein 8)				Bacillus sp. B14905	SVVPSLIDTGVCDQAQITREAAANLGTVSDAQKRWCELRL TRAKV
		126591890	gb	EAZ85973.1	thiol peroxidase (superoxide-inducible protein 8)				Bacillus sp. B14905	
162	0	42628789	ref	ZP_00154345.1	COG2077: Peroxiredoxin				Haemophilus influenzae R2846	NIFPSIDTGVCATSVRCSISADAQARFCGIEIENAGVDLAGLTSRA
		148826605	ref	YP_001291358.1	phosphoribosylformylglycinamide synthase				Haemophilus influenzae PflEE	

		148716766	gb	ABQ98975.1	phosphoribosylformylglycinamide synthase	Haemophilus influenzae PttEE		
163	8.39E-13	118475243	ref	YP_892893.1	thiol peroxidase	Campylobacter fetus subsp. fetus 82-	NVTVVVPSLDTGVCAAEARIISMDAMGRFCEGIENLLEGLLTRA	
		118414469	gb	ABK82889.1	thiol peroxidase	Campylobacter fetus subsp. fetus 82-		
164	0	104781760	ref	YP_608258.1	thiol peroxidase	Pseudomonas entomophila L48	QVTNIFPSVDTPTCATSVRCISADAAQARFCEGIENVLAGLAARA	
		95110747	emb	CAK15460.1	thiol peroxidase	Pseudomonas entomophila L48		
165	0	83746799	ref	ZP_00943847.1	Thioredoxin peroxidase	Ralstonia solanacearum UW551	VGAKAPNIVPSLDTPYCATSTRSISADAAAGRFCEGVDLGLTARA	
		83726566	gb	EAP73698.1	Thioredoxin peroxidase	Ralstonia solanacearum UW551		
166	3.47E-18	123457052	ref	XP_001316257.1	thiol peroxidase, putative	Trichomonas vaginalis G3	TAFAQGTKLNIFFSMDTGVCAASVRCISKDAQGRFCLEGLLARS	
		121899958	gb	EAY04034.1	thiol peroxidase, putative	Trichomonas vaginalis G3		
167	0	145636696	ref	ZP_01792363.1	hypothetical protein CGSHIHH_03808	Haemophilus influenzae PttHH	NIFPSIDTGVCATSVRCISADAAQARFCEGIENAGVDLGLTSRA	
		145640835	ref	ZP_01796417.1	probable thiol peroxidase	Haemophilus influenzae R3021		
		145270222	gb	EDK10158.1	hypothetical protein CGSHIHH_03808	Haemophilus influenzae PttHH		
		145274349	gb	EDK14213.1	probable thiol peroxidase	Haemophilus influenzae 22.4-21		
168	1.43E-12	162447212	ref	YP_001620344.1	peroxiredoxin family protein	Acholeplasma laidlawii PG-8A	AVDSAVPSLDTSVCDIQTRTISNDAAQKRWGNGLEITELRLARS	
		161985319	gb	ABX80968.1	peroxiredoxin family protein	Acholeplasma laidlawii PG-8A		
169	2.64E-12	16800693	ref	NP_470961.1	hypothetical protein lin1625	Listeria innocua Clp11262	VGTERKEVTSVVPSIDTSCVCSQTQTRTISVDQAKKWCELRLLARS	
		24212522	sp	Q92BC5	TPX_LISIN Probable thiol peroxidase	Listeria innocua		
		16414112	emb	CAC96856.1	lin1625	Listeria innocua		
170	4.43E-21	157155990	ref	YP_001462632.1	thiol peroxidase	Escherichia coli E24377A	DVTNIFPSIDTGVCAVSVRCISADAAQGRFCEGLNNVLKGLAARA	
		157078020	gb	ABV17728.1	thiol peroxidase	Escherichia coli E24377A		
171	0	118472640	ref	YP_887783.1	thiol peroxidase	Mycobacterium smegmatis str. MC2	EVTNIFPSVDTPVCATSVRCVSKDAQKRFCEGIENVMAGLLGRA	
		118173927	gb	ABK74823.1	thiol peroxidase	Mycobacterium smegmatis str. MC2		
172	0	84387412	ref	ZP_00990431.1	thiol peroxidase	Vibrio splendidus 12B01	SVTELNNLTNIFPSIDTPTCAASVRCISADAMNRFCKGLSARA	
		84377665	gb	EAP94529.1	thiol peroxidase	Vibrio splendidus 12B01		
173	2.95E-12	56964507	ref	YP_176238.1	thiol peroxidase	Bacillus clausii KSM-K16	EVTSVPSLDTGVCDQQQTRTISVDQAKRWCELRLLARSEAALEA	
		56910750	dbj	BAD65277.1	thiol peroxidase	Bacillus clausii KSM-K16		
174	2.41E-18	73542554	ref	YP_297074.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma	Ralstonia eutropha JMP134	NIVPSLDTPVCAQASRTTISADAMGRFCRGAEFKGVDLAGVTARA	
		72119967	gb	AAZ62230.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Ralstonia eutropha JMP134		
175	1.11E-16	146319037	ref	YP_001198749.1	thiol peroxidase	Streptococcus suis 05ZYH83	PVTSVPSIDTGCIDTQTRTISADAAQKRWCAAGLEDAEWNLLARA	
		145689843	gb	ABP90349.1	Peroxioredoxin	Streptococcus suis 05ZYH83		
176	0	70730225	ref	YP_259964.1	thiol peroxidase	Pseudomonas fluorescens Pf-5	QVTNIFPSVDTPTCATSVRCISADAAQARFCEGIENVLAGLTARA	
		68344524	gb	AAV92130.1	thiol peroxidase	Pseudomonas fluorescens Pf-5		
177	2.49E-15	42783821	ref	NP_981068.1	thiol peroxidase	Bacillus cereus ATCC 10987	SVVPSIDTGVCDAAQTRTISVDAQKRWCVVTELRLARAYVSEGT	
		42739751	gb	AAS43676.1	thiol peroxidase	Bacillus cereus ATCC 10987		
178	1.86E-18	149001930	ref	ZP_01826884.1	thiol peroxidase	Streptococcus pneumoniae SP14-	VSFTGKSVVPSIDTGCISQTQTRGLDITVSMDAQKRWCEWHLLARA	
		147759739	gb	EDK66729.1	thiol peroxidase	Streptococcus pneumoniae SP14-		
179	1.28E-14	49483954	ref	YP_041178.1	putative thiol peroxidase	Staphylococcus aureus subsp.	VTLADSVVPSIDTGVCDQQQTRREGIVLTAKKRWCGDELRLARA	
		60390701	sp	Q6GFZ4	TPX_STAAR Probable thiol peroxidase	Staphylococcus aureus subsp.		
		49242083	emb	CAG40782.1	putative thiol peroxidase	Staphylococcus aureus subsp.		
180	8.37E-19	23099648	ref	NP_693114.1	thioredoxin peroxidase	Oceanobacillus ihenyensis HTE831	NVTLGAEKSVVPSIDTGVCSFQTRTISMDAQKRWCELRLLSRA	



					TPX_OCEIH Probable thiol peroxidase thioredoxin peroxidase				Oceanobacillus ihyenssis HTE831	
181	7.02E-18	114321726 ref 114228120 gb	Q8EPB7 BAC14149.1		thiol peroxidase (atypical 2-Cys peroxiredoxin) thiol peroxidase (atypical 2-Cys peroxiredoxin)				Alkalilimnicola ehrlichii MLHE-1 Alkalilimnicola ehrlichii MLHE-1	LGGEPIGSTNIVPSLDTGVCSSTSAKTISADAQAKRFCTAGICARA
182	6.49E-19	78186605 ref 78166507 gb	YP_374648.1 ABB23605.1		thiol peroxidase thiol peroxidase (atypical 2-Cys peroxiredoxin)				Pelodictyon luteolum DSM 273 Pelodictyon luteolum DSM 273	LPAVGTNIFPSLDTAVCAASVRCISADAHNRCFGVTLKGLLSRA
183	1.35E-19	121726044 ref 147673729 ref 13377515 gb 407282 gb 121631526 gb EAX63896.1 146315612 gb	ZP_01679343.1 YP_001216305.1 AAK20751.1 AA64918.1 EAX63896.1 ABQ20151.1		tagD protein tagD protein AF325733_7 toxR-activated gene D protein proposed tagD product tagD protein tagD protein				Vibrio cholerae V52 Vibrio cholerae O395 Vibrio cholerae Vibrio cholerae V52 Vibrio cholerae O395	TVTISIFPSIDIPVCSKSVKCVSADAMSRSFCVAVNVTLRGLAARA TVTISIFPSIDIPVCSKSVKCVSADAMSRSFCVAVNVTLRGLAARA
184	1.73E-19	153618066 ref 126511412 gb	ZP_01970733.1 EAZ74006.1		tagD protein tagD protein				Vibrio cholerae NCTC 8457 Vibrio cholerae NCTC 8457	TVTISIFPSIDIPVCSKSVKCVSADAMSRSFCVAVNVTLRGLAARA TVTISIFPSIDIPVCSKSVKCVSADAMSRSFCVAVNVTLRGLAARA
185	0	126355867 ref 126320377 gb	ZP_01712873.1 EAZ71229.1		Redoxin domain protein Redoxin domain protein				Pseudomonas putida GB-1 Pseudomonas putida GB-1	QVTNIFPSVDPTTCATSVRCISADAQARFCEGLNVLGALAARA QVTNIFPSVDPTTCATSVRCISADAQARFCEGLNVLGALAARA
186	0	148827941 ref 148719183 gb	YP_001292694.1 ABR00311.1		diaminopimelate epimerase diaminopimelate epimerase				Haemophilus influenzae PHGG Haemophilus influenzae PHGG	NIFFSIDTGVCATSVRCISADAQARFCEGIENAGVDLALSTRA NIFFSIDTGVCATSVRCISADAQARFCEGIENAGVDLALSTRA
187	6.01E-18	126175216 ref 153001542 ref 125998421 gb 151366160 gb	YP_001051365.1 YP_001367223.1 ABN62496.1 ABS09160.1		Redoxin domain protein Redoxin domain protein Redoxin domain protein Redoxin domain protein				Shewanella baltica OS155 Shewanella baltica OS185 Shewanella baltica OS155 Shewanella baltica OS185	TVTSAVPSLDTGVCAALQTKTISADAQAKRFCDYGLLARDAEKG TVTSAVPSLDTGVCAALQTKTISADAQAKRFCDYGLLARDAEKG TVTSAVPSLDTGVCAALQTKTISADAQAKRFCDYGLLARDAEKG TVTSAVPSLDTGVCAALQTKTISADAQAKRFCDYGLLARDAEKG
188	5.42E-16	120598158 ref 124547089 ref 146293770 ref 120568251 gb 124503563 gb 145665460 gb	YP_962732.1 ZP_01706048.1 YP_001184194.1 ABM24178.1 EAY53641.1 ABP76395.1		Redoxin domain protein Redoxin Redoxin domain protein Redoxin domain protein Redoxin Redoxin domain protein				Shewanella sp. W3-18-1 Shewanella putrefaciens 200 Shewanella putrefaciens CN-32 Shewanella sp. W3-18-1 Shewanella putrefaciens 200 Shewanella putrefaciens CN-32	VDSAVPSLDTGVCAALQTKTISTDAQAKRFCDYGLLARDAEKG VDSAVPSLDTGVCAALQTKTISTDAQAKRFCDYGLLARDAEKG VDSAVPSLDTGVCAALQTKTISTDAQAKRFCDYGLLARDAEKG VDSAVPSLDTGVCAALQTKTISTDAQAKRFCDYGLLARDAEKG VDSAVPSLDTGVCAALQTKTISTDAQAKRFCDYGLLARDAEKG VDSAVPSLDTGVCAALQTKTISTDAQAKRFCDYGLLARDAEKG
189	1.79E-19	118594635 ref 118440413 gb	ZP_01551982.1 EAV47040.1		Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Methylhydrophilates bacterium Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Methylhydrophilates bacterium				Methylophilates bacterium Methylophilates bacterium	QVTNIFPSVDPTTCALSVKICISADAQAKRFCLRGLTSRALIAEIT QVTNIFPSVDPTTCALSVKICISADAQAKRFCLRGLTSRALIAEIT
190	5.35E-12	57505388 ref 57016213 gb	ZP_00371316.1 EAL52999.1		thiol peroxidase thiol peroxidase				Campylobacter upsaliensis RM3195 Campylobacter upsaliensis RM3195	LTMPSLDTPVCASEARKGAEMIGRFGVLLLEGLLARAFVKD LTMPSLDTPVCASEARKGAEMIGRFGVLLLEGLLARAFVKD
191	6.35E-17	118033512 ref 117980827 gb	ZP_01504955.1 EAU95222.1		Redoxin Redoxin				Burkholderia phymatum STM815 Burkholderia phymatum STM815	NIVPSLDTPTCATSTRVYSGDAATRFCEGIENGVGVDLTGLTARA NIVPSLDTPTCATSTRVYSGDAATRFCEGIENGVGVDLTGLTARA
192	1.91E-13	163849099 ref 163670382 gb	YP_001637137.1 ABY36748.1		Redoxin domain protein Redoxin domain protein				Chloroflexus aurantiacus J-10-fl Chloroflexus aurantiacus J-10-fl	QVTSVPSLDTGVCSKQTTAARLAGQATVSADAQARWCGTAYC QVTSVPSLDTGVCSKQTTAARLAGQATVSADAQARWCGTAYC
193	0	120436526 ref 117578676 emb	YP_862212.1 CAL67145.1		thiol peroxidase thiol peroxidase				Gramella forsetii KTO803 Gramella forsetii KTO803	RVTNIFPSIDTGVCAATSVRCISRDAQAKRFVEGLENVFEGLLSRA RVTNIFPSIDTGVCAATSVRCISRDAQAKRFVEGLENVFEGLLSRA
194	1.79E-18	87118639 ref 86166273 gb	ZP_01074538.1 EAQ67539.1		thiol peroxidase thiol peroxidase				Marinomonas sp. MED121 Marinomonas sp. MED121	VGAKAPNIFPSIDTPTCATSVRCVSDAAAARFPGVDLVALTSRA VGAKAPNIFPSIDTPTCATSVRCVSDAAAARFPGVDLVALTSRA
195	8.55E-14	78221407 ref 78192662 gb	YP_383154.1 ABB30429.1		Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Methylhydrophilates bacterium thiol peroxidase (atypical 2-Cys peroxiredoxin)				Geobacter metallireducens GS-15 Geobacter metallireducens GS-15	ALAVGDSAVPSLDTIPVCDTETRTVSMDAQKRWCEVTYAAVLAA ALAVGDSAVPSLDTIPVCDTETRTVSMDAQKRWCEVTYAAVLAA

196	1.33E-16	24374852 ref	NP_718895.1	antioxidant, AhpC/TSA family	Shewanella oneidensis MR-1	TVTSAVPSLDTGVCALQTKTISTDAQKRFCDYGLLARDAEKG
		24349544 gb	AAN56339.1	AE015771_9 antioxidant, AhpC/TSA family	Shewanella oneidensis MR-1	
197	0	77975346 ref	ZP_00830882.1	COG2077: Peroxiredoxin	Yersinia frederiksenii ATCC 33641	NIFPSIDTGVCAASVRCISSDAQSRFCVVTIRGAEFKLAGL TARA
198	0	53714055 ref	YP_100047.1	putative thiol peroxidase	Bacteroides fragilis YCH46	NIFPSLDTGVCATSVRAISKDAQGRFCGEIENVGVRLAGLLARA
		60682249 ref	YP_212393.1	putative thiol peroxidase	Bacteroides fragilis NCTC 9343	
		52216920 dbj	BAD49513.1	putative thiol peroxidase	Bacteroides fragilis YCH46	
		60483683 emb	CAH08472.1	putative thiol peroxidase	Bacteroides fragilis NCTC 9343	
199	2.47E-14	51894101 ref	YP_076792.1	thioredoxin peroxidase	Symbiobacterium thermophilum IAM	SSVPSLDTGVCDTQTRTISADAQKRWCQGVDSKAYGTAALAAAR
		51857790 dbj	BAD41948.1	thioredoxin peroxidase	Symbiobacterium thermophilum IAM	
200	5.63E-22	91775593 ref	YP_545349.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Methylobacillus flagellatus KT	TVTNIFPSIDTPTCATSVRCISADAGSRFCGLENVLAGL TARA
		91709580 gb	ABE49508.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)	Methylobacillus flagellatus KT	
201	5.04E-16	117919654 ref	YP_868846.1	Redoxin domain protein	Shewanella sp. ANA-3	TVTSAVPSLDTGVCALQTKTISTDAQKRFCDYGLLARDAE GQ
		117611986 gb	ABK47440.1	Redoxin domain protein	Shewanella sp. ANA-3	
202	0	163756957 ref	ZP_02164064.1	Redoxin	Kordia algicida OT-1	NIFPSIDTSCVATSVRCISHDAHSRFCGLENLGLDMQKLSHRV
		161323076 gb	EDP94418.1	Redoxin	Kordia algicida OT-1	
203	2.09E-13	153950948 ref	YP_001398294.1	thiol peroxidase	Campylobacter jejuni subsp. doylei	KVSLKGGKTLVSPSLDTPVCATEARNGAEVAMGRFCLEGLLARA
		152938394 gb	ABS43135.1	thiol peroxidase	Campylobacter jejuni subsp. doylei	
204	7.44E-21	94499155 ref	ZP_01305693.1	Peroxiredoxin	Oceanobacter sp. RED65	NIFPSVDPTTCATSVRCVSADAMNRFCEGLENVGDLTGLLSRA
		94428787 gb	EAT13759.1	Peroxiredoxin	Oceanobacter sp. RED65	
206	9.61E-13	57240637 ref	ZP_00366586.1	thiol peroxidase	Campylobacter lari RM2100	AGVELELTMPSLDTPVCSSKQAKIISIMDAMDRFCGVDFAGLLARA
		57018978 gb	EAL55751.1	thiol peroxidase	Campylobacter lari RM2100	
207	8.58E-19	123501795 ref	XP_001328156.1	thiol peroxidase, putative	Trichomonas vaginalis G3	PVTPEELVNIFFSMDTGVCAASVRAISKDAQTRFCMNGLLARA
		123501820 ref	XP_001328164.1	thiol peroxidase, putative	Trichomonas vaginalis G3	
		121911095 gb	EAY15933.1	thiol peroxidase, putative	Trichomonas vaginalis G3	
		121911103 gb	EAY15941.1	thiol peroxidase, putative	Trichomonas vaginalis G3	
208	0	15801846 ref	NP_287864.1	thiol peroxidase	Escherichia coli O157:H7 EDL933	DVTNIFPSIDTGVCAASVRCISADAGSRFCGLENNV/LKGLAARA
		15831157 ref	NP_309930.1	thiol peroxidase	Escherichia coli O157:H7 str. Sakai	
		16129285 ref	NP_415840.1	lipid hydroperoxide peroxidase	Escherichia coli K12	
		24112719 ref	NP_707229.1	thiol peroxidase	Shigella flexneri 2a str. 301	
		26247660 ref	NP_753700.1	thiol peroxidase	Escherichia coli CF T073	
		30062842 ref	NP_837013.1	thiol peroxidase	Shigella flexneri 2a str. 2457T	
		75212762 ref	ZP_00712762.1	COG2077: Peroxiredoxin	Escherichia coli B171	
		75231878 ref	ZP_00718219.1	COG2077: Peroxiredoxin	Escherichia coli B7A	
		7524124 ref	ZP_00725918.1	COG2077: Peroxiredoxin	Escherichia coli F11	
		75259436 ref	ZP_00730755.1	COG2077: Peroxiredoxin	Escherichia coli E22	
		75515056 ref	ZP_00737260.1	COG2077: Peroxiredoxin	Escherichia coli 53638	
		82776688 ref	YP_403037.1	thiol peroxidase	Shigella dysenteriae Sd197	
		83669452 ref	ZP_00920905.1	COG2077: Peroxiredoxin	Shigella dysenteriae 1012	
		83587465 ref	ZP_00926093.1	COG2077: Peroxiredoxin	Escherichia coli 101-1	
		89108171 ref	AP_001951.1	lipid hydroperoxide peroxidase	Escherichia coli W3110	
		91210618 ref	YP_540604.1	thiol peroxidase	Escherichia coli UT189	
		110641559 ref	YP_669289.1	thiol peroxidase	Escherichia coli 536	
		110805323 ref	YP_688843.1	thiol peroxidase	Shigella flexneri 5 str. 8401	
		117623577 ref	YP_852490.1	thiol peroxidase	Escherichia coli APEC O1	
		124527921 ref	ZP_01699310.1	Redoxin domain protein	Escherichia coli B	
		157160835 ref	YP_001458153.1	thiol peroxidase	Escherichia coli HS	

					TPX_ECOLI_Thiol peroxidase (Scavengase P20)	Escherichia coli K12
		67473489 sp	POA862		TPX_ECOL6_Thiol peroxidase (Scavengase P20)	Escherichia coli strain O6
		67473492 sp	POA863		TPX_ECO57_Thiol peroxidase (Scavengase P20)	Escherichia coli O157:H7
		67473493 sp	POA864		TPX_SHIFL_Thiol peroxidase (Scavengase P20)	Shigella flexneri
		67473494 sp	POA865		TPX_SHIDY_Thiol peroxidase (Scavengase P20)	Shigella dysenteriae
		67473497 sp	POA866		AF15317_31 thiol peroxidase	Shigella dysenteriae
		6759976 gb	AAF28134.1		AE005374_1 thiol peroxidase	Escherichia coli O157:H7 EDL933
		12515442 gb	AA656478.1		AE016760_121 Thiol peroxidase	Escherichia coli CF1073
		26108062 gb	AAN80262.1		lipid hydroperoxide peroxidase	Escherichia coli K12
		1787584 gb	AAC74406.1		scavengase p20	Escherichia coli
		1931625 gb	AA45284.1		thiol peroxidase	Escherichia coli O157:H7 str. Sakai
		13361368 dbj	BAB35326.1		thiol peroxidase	Shigella flexneri 2a str. 301
		24051640 gb	AAN42936.1		thiol peroxidase	Shigella flexneri 2a str. 2457T
		30041090 gb	AAP16820.1		thiol peroxidase	Shigella dysenteriae Sd197
		81240636 gb	ABB61546.1		thiol peroxidase	Escherichia coli W3110
		85674905 dbj	BAA14906.2		lipid hydroperoxide peroxidase	Escherichia coli UT189
		91072192 gb	ABE07073.1		thiol peroxidase	Escherichia coli 536
		110343151 gb	ABG69388.1		thiol peroxidase	Shigella flexneri 5 str. 8401
		110814871 gb	ABF03538.1		thiol peroxidase	Escherichia coli APEC O1
		115512701 gb	ABJ00776.1		thiol peroxidase	Escherichia coli C str. ATCC 8739
		124501086 gb	EAY48552.1		Redoxin domain protein	Escherichia coli HS
		157066515 gb	ABV05770.1		thiol peroxidase	
209	1.11E-16	81096557 ref	ZP_00874897.1		Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Streptococcus suis 89/1591
		80977379 gb	EAP40922.1		Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Streptococcus suis 89/1591
210	9.24E-13	90580443 ref	ZP_01236249.1		thiol peroxidase	Vibrio angustum S14
		90438352 gb	EAS63537.1		thiol peroxidase	Vibrio angustum S14
211	5.21E-21	28869939 ref	NP_792558.1		thiol peroxidase	Pseudomonas syringae pv. tomato
		28853184 gb	AAO56253.1		thiol peroxidase	Pseudomonas syringae pv. tomato
212	7.11E-16	160694801 gb	EDP84809.1		thiol peroxidase	Burkholderia mallei ATCC 10399
213	0	16765025 ref	NP_460640.1		thiol peroxidase	Salmonella typhimurium LT2
		62180245 ref	YP_216662.1		thiol peroxidase	Salmonella enterica subsp. enterica
		161613842 ref	YP_001587807.1		hypothetical protein SPAB_01577	Salmonella enterica subsp. enterica
		24212521 gb	Q8ZP65		TPX_SALTY_Probable thiol peroxidase	Salmonella typhimurium LT1
		16420209 gb	AAL20599.1		thiol peroxidase	Salmonella typhimurium LT2
		62127678 gb	AA65581.1		thiol peroxidase	Salmonella enterica subsp. enterica
		161363206 gb	ABX66974.1		hypothetical protein SPAB_01577	Salmonella enterica subsp. enterica
214	0	146307455 ref	YP_001187920.1		Redoxin domain protein	Pseudomonas mendocina ymp
		145575656 gb	ABP85188.1		thiol peroxidase (atypical 2-Cys peroxiredoxin)	Pseudomonas mendocina ymp
215	5.18E-23	23014942 ref	ZP_00054735.1		COG2077: Peroxiredoxin	Magnetospirillum magnetotacticum
216	0	118619311 ref	YP_906643.1		thiol peroxidase	Mycobacterium ulcerans Agy99
		118570421 gb	ABL05172.1		thiol peroxidase Tpx	Mycobacterium ulcerans Agy99
217	0	78188602 ref	YP_378940.1		thiol peroxidase	Chlorobium chlorochromatii CaD3
		78170801 gb	ABB27897.1		thiol peroxidase (atypical 2-Cys peroxiredoxin)	Chlorobium chlorochromatii CaD3
218	1.84E-16	25011247 ref	NP_735642.1		thiol peroxidase	Streptococcus agalactiae NEM316
		60390727 sp	Q8E536		TPX_STRA3_Probable thiol peroxidase	Streptococcus agalactiae NEM316
		23095671 emb	CAD46857.1		Unknown	Streptococcus agalactiae NEM316
219	2.16E-16	52081440 ref	YP_080231.1		thiol peroxidase	Bacillus licheniformis ATCC 14580
		52004651 gb	AAU24593.1		thiol peroxidase	Bacillus licheniformis ATCC 14580

220	4.35E-16	126439476	126213969	ref	YP_001060480.1 ABN82475.1	thiol peroxidase thiol peroxidase	Burkholderia pseudomallei 668 Burkholderia pseudomallei 668	KVTNVPVSLDPTCAASTRVVSADAATRFYGVNVTLDGLAARA
221	0	126664498	126630824	ref	ZP_01735482.1 EBA01438.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Maf	Marinobacter sp. ELB17 Marinobacter sp. ELB17	SIFPSIDTGVCAASTREKAADLVISADAFARFCGLDLAAGLCARA
222	0	77979524		ref	ZP_00834942.1	COG2077: Peroxiredoxin	Yersinia intermedia ATCC 29909	PVTNIFPSIDTGVCAASVRCISSDAQSRFCRGADFKLAGLTARA
223	1.58E-22	163765768	160353734	ref	ZP_02172799.1 EDP80414.1	Redoxin domain protein Redoxin domain protein	Anaeromyxobacter sp. K Anaeromyxobacter sp. K	VGAKAPDVTNIVPSLDTAVCATSTRVVSADAQKRFCFCLAGLTARA
224	1.76E-18	49524076		emb	CAG62939.1	thiol peroxidase	Burkholderia multivorans	NIVPSLDTPTCATSTRVVSADAASRFCEGLENVGVNDLNGLTARA
225	1.29E-13	158319724	158139923	ref	YP_001512231.1 ABWV18235.1	Redoxin domain protein Redoxin domain protein	Alkaliphilus oremlandii OhnLAs Alkaliphilus oremlandii OhnLAs	LVTSVVPSLDTGVCELQITFEAAELGTISVDAQKRFCFCELLRSRG
226	2.95E-17	75759970	74492528	ref	ZP_00740038.1 EAO55676.1	Thioredoxin peroxidase Thioredoxin peroxidase	Bacillus thuringiensis serovar Bacillus thuringiensis serovar	SVVPSIDTGYCDAQTRTISADAKRWCVVTELRLRARAYVGEET
227	1.65E-18	56477081	56313124	ref	YP_158670.1 CAI07769.1	probable thiol peroxidase probable thiol peroxidase	Azoarcus sp. EbN1 Azoarcus sp. EbN1	DIAEVTNIVPSLDTPTCATSTRVISGDAAKRFCGLDLKGLAARA
228	0	19552312	62389975	ref	NP_600314.1 YP_225377.1	peroxiredoxin THIOL PEROXIDASE	Corynebacterium glutamicum ATCC Corynebacterium glutamicum ATCC	NIFPSVDTGYCATSVRASLENTCISKDALGRFCNVTLKGLLARS
229	1.49E-11	29142011	56413408	ref	NP_805353.1 YP_150483.1	putative thiol peroxidase putative thiol peroxidase	Salmonella enterica subsp. enterica Salmonella enterica subsp. enterica	LGQEHAKPGIAEGVIVVPSLDTPVCEWQVKVLSMDAQARFIVT
230	9.88E-13	118744934	118882132	ref	ZP_01592919.1 EAV88546.1	Redoxin Redoxin	Geobacter lovleyi SZ Geobacter lovleyi SZ	SAVPSLTPVCDTEIRTISLDAQKRWCELLLSRCDVDAEGIEVT
231	1.75E-21	85059476	84779996	ref	YP_455178.1 BAE74773.1	thiol peroxidase thiol peroxidase	Sodalis glossinidius str. 'morsitans' Sodalis glossinidius str. 'morsitans'	DVTNIFPSVDTGTCATSVRCISADAKRFCFEGLEKVMKGLAARA
232	8.59E-14	163763528	160355848	ref	ZP_02170589.1 EDP82500.1	Redoxin domain protein Redoxin domain protein	Bacillus selenitireducens MLS10 Bacillus selenitireducens MLS10	KGTEVKSVVPSIDTGVCDCEQTRTISVDAGKRWCVGDELLRLARS
233	0	145634838	145268004	ref	ZP_01790546.1 EDK08000.1	hypothetical protein CGSHIAA_04518 hypothetical protein CGSHIAA_04518	Haemophilus influenzae P1HAA Haemophilus influenzae P1HAA	NIFPSIDTGVCATSVRCISADAKRFCFEGLEKVMKGLAARA
234	2.75E-13	150017535	149904000	ref	YP_001309789.1 ABR34833.1	Redoxin domain protein Redoxin domain protein	Clostridium beijerinckii NCIMB 8052 Clostridium beijerinckii NCIMB 8052	QGVNEVTVTVSPVPSIDTPTVCDLEVRVVSMDAQGRWCELGLLTR
235	1.42E-18	148993779	147927735	ref	ZP_01823206.1 EDK78759.1	thiol peroxidase thiol peroxidase	Streptococcus pneumoniae SP9 Streptococcus pneumoniae SP9	VSFTGKSVVPSIDTGVCDCEQTRTISVDAGKRWCVGDEWHLAR
236	5.99E-20	154148995	153805004	ref	YP_001407293.1 ABS52011.1	thiol peroxidase (Scavengase P20) thiol peroxidase (Scavengase P20)	Campylobacter hominis ATCC BAA- Campylobacter hominis ATCC BAA-	TVTATVPSLDTGVCAATEIRVISMDAMGRFCFEGLEKVMKGLAARA
237	2.20E-15	163691639	162436386	ref	ZP_02115827.1 EDQ46958.1	Redoxin domain protein Redoxin domain protein	Elusimicrobium minutum Pei191 Elusimicrobium minutum Pei191	KGAEKLTLSVPSIDTPTVCTIETRTVSKDAQKRWTEIYILSRA
238	1.42E-11	157165156	112800320	ref	YP_001467743.1 EAT197664.1	thiol peroxidase (Scavengase P20) thiol peroxidase (Scavengase P20)	Campylobacter concisus 13826 Campylobacter concisus 13826	GGNNGVCLPSLDTGVCAAEARIISNDAMGRFCLKGLARAIEVT



									Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma	Prosthecochloris aestuarii DSM 271		
249	0	68550608	ref						Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma	Pelodictyon phaeoclastriforme BU-		ITFKGTNIFPSLDTPVCAASVRCISADAHKRFCVGLKLLSRA
									Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma	Pelodictyon phaeoclastriforme BU-		
250	0	15609069	ref						thiol peroxidase	Mycobacterium tuberculosis H37Rv		NIFPSVDTPVCAVSRVCSKDAQKRFCGTEGVNTMAGLLARY
									thiol peroxidase	Mycobacterium tuberculosis		
									thiol peroxidase	Mycobacterium bovis AF2122/97		
									COG2077: Peroxiredoxin	Mycobacterium tuberculosis C		
									thiol peroxidase	Mycobacterium bovis BCG str.		
									thiol peroxidase	Mycobacterium tuberculosis H37Ra		
									thiol peroxidase	Mycobacterium tuberculosis F11		
									TPX_MYCBO Probable thiol peroxidase	Mycobacterium bovis		
									TPX_MYCTU Probable thiol peroxidase	Mycobacterium tuberculosis		
									PROBABLE THIOL PEROXIDASE TPX	Mycobacterium tuberculosis H37Rv		
									thiol peroxidase	Mycobacterium tuberculosis		
									tpx protein	Mycobacterium tuberculosis		
									PROBABLE THIOL PEROXIDASE TPX	Mycobacterium bovis AF2122/97		
									Probable thiol peroxidase tpx	Mycobacterium bovis BCG str.		
									thiol peroxidase tpx	Mycobacterium tuberculosis C		
									thiol peroxidase tpx	Mycobacterium tuberculosis str.		
									thiol peroxidase	Mycobacterium tuberculosis H37Ra		
									thiol peroxidase	Mycobacterium tuberculosis F11		
251	0	156933829	ref						hypothetical protein ESA_01655	Enterobacter sakazakii ATCC BAA-		NIFPSIDTGVCAASVRTGMENITCVSADAQRSFCVGLKGLTARA
									hypothetical protein ESA_01655	Enterobacter sakazakii ATCC BAA-		
252	6.99E-19	162454000	ref						thiol peroxidase	Sorangium cellulosum 'So ce 56'		NIFPSVDTPVCAVSRVRAEKLVNTNISADAHTRFCVGLLARS
									thiol peroxidase	Sorangium cellulosum 'So ce 56'		
253	1.27E-22	71906172	ref						Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma	Dechloromonas aromatica RCB		NIFPSIDTPTCATSVRAKANGLCISADAQAQRFCDLGLDGLTARA
									thiol peroxidase (atypical 2-Cys peroxiredoxin)	Dechloromonas aromatica RCB		
254	1.31E-14	82751301	ref						probable thiol peroxidase	Staphylococcus aureus RF122		VTLADSVPSIDTGVCDQQTREGVLTACKRWCGLDLRLIARA
									probable thiol peroxidase	Staphylococcus aureus RF122		
255	0	83753706	pdb						A Chain A. Structure Of Mycobacterial Thiol Peroxidase Tpx	Mycobacterium Tuberculosis		NIFPSVDTPVSATSVRCSVSKDAQKRFCGTEGVNTMAGLLARA
									B Chain B. Structure Of Mycobacterial Thiol Peroxidase Tpx	Mycobacterium Tuberculosis		
256	9.58E-14	57237624	ref						thiol peroxidase	Campylobacter jejuni RM1221		EVGADGKTLVPSLDTPVCAVTEARNGAEVAMGRFCEGLLARA
									thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									probable thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									thiol peroxidase	Campylobacter jejuni RM1221		
									thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									probable thiol peroxidase	Campylobacter jejuni subsp. jejuni		
									thiol peroxidase	Campylobacter jejuni subsp. jejuni		
257	6.31E-18	118044952	ref						Redoxin	Burkholderia phytofirmans PsJN		NIVPSLDTPTCATSTRVWSGDAASRFCEGIENVGVDLTGLTARA
									Redoxin	Burkholderia phytofirmans PsJN		
258	8.01E-09	124266797	ref						thiol peroxidase	Methylobium petroleiphilium PM1		VGLEQFIVPSLEIMPTCAASLRSHDGVLDLKGLTARAALTRSC
									thiol peroxidase (atypical 2-Cys peroxiredoxin)	Methylobium petroleiphilium PM1		
259	0	119356776	ref						Redoxin domain protein	Chlorobium phaeobacteroides DSM		ADFEGRNIFPSLDTPVCAASVRCISADAHSRFCVGLKLLCRA
									thiol peroxidase (atypical 2-Cys peroxiredoxin)	Chlorobium phaeobacteroides DSM		

260	0	34496325 ref 34102178 gb	NP_900540.1 AAQ58545.1	thiol peroxidase thiol peroxidase	Chromobacterium violaceum ATCC Chromobacterium violaceum ATCC	TVTNIFPSVDTPTCATSVRCVSADAAQKRFCEGIENVLGLTARA
261	7.23E-19	149187579 ref 148838459 gb	ZP_01865876.1 EDL55399.1	thiol peroxidase thiol peroxidase	Vibrio shionii AK1 Vibrio shionii AK1	KVTNIFPSIDTPVCANSVRAAGRFCCEGIENVLRGLTARACVSKD
262	2.78E-19	126664023 ref 126623972 gb	ZP_01735017.1 EAZ94666.1	Peroxiredoxin Peroxiredoxin	Flavobacteria bacterium BAL38 Flavobacteria bacterium BAL38	NIFPSIDTGTCAASVRCISRDAQKRFCEGIENVGLELGLHSRV
263	3.09E-17	161525952 ref 160343381 gb	YP_001580964.1 ABX16467.1	Redoxin domain protein Redoxin domain protein	Burkholderia multivorans ATCC Burkholderia multivorans ATCC	NIVPSLDTPTCATSTRVVSADAAATRFCEGIENVGVDLNGLTARA
264	3.30E-17	30264713 ref 4778339 ref 49187531 ref 52140868 ref 65322010 ref 118479780 ref 165869582 ref	NP_847090.1 YP_021534.2 YP_030784.1 YP_085961.1 ZP_00394969.1 YP_896931.1 ZP_02214240.1	thiol peroxidase thiol peroxidase thiol peroxidase thiol peroxidase thiol peroxidase thiol peroxidase thiol peroxidase	Bacillus anthracis str. Ames Bacillus anthracis str. Ames Bacillus anthracis str. Steine Bacillus cereus E331 Bacillus anthracis str. A2012 Bacillus thuringiensis str. Al Hakam Bacillus anthracis str. A0488 Bacillus anthracis str. Ames Bacillus anthracis str. Ames Bacillus anthracis str. Steine Bacillus cereus E331	SVVPSIDTGVCDAAQIRTSADAAQKRWCVVTELRARAYVSEGT
265	3.14E-17	78065160 ref 77965905 gb	YP_367929.1 ABB07285.1	Alkyl hydroperoxide reductase/Thiol specific antioxidant/ Malonaldehyde peroxidase (atypical 2-Cys peroxidase)	Burkholderia sp. 383 Burkholderia sp. 383	VGAQGANIVPSLDPTCATSTRVVSADAAATRFCEGIENVLGLTARA
266	5.53E-20	42521937 ref 39574467 emb	NP_967317.1 CAE77971.1	thiol peroxidase thiol peroxidase	Bdellovibrio bacteriovorus HD100 Bdellovibrio bacteriovorus HD100	NIFPSVDTGTCAASVRNISADAAQARFCIVDLAGLLSRAEAALAS
267	5.08E-22	160286238 pdb 160286239 pdb 160286240 pdb 160286241 pdb	2YZH 2YZH 2YZH 2YZH	A Chain A, Crystal Structure Of Peroxiredoxin-Like Protein F B Chain B, Crystal Structure Of Peroxiredoxin-Like Protein F C Chain C, Crystal Structure Of Peroxiredoxin-Like Protein F D Chain D, Crystal Structure Of Peroxiredoxin-Like Protein F	Aquifex Aeolicus Aquifex Aeolicus Aquifex Aeolicus Aquifex Aeolicus	VVTTVPSLDTPVCETETKAGMEGVVVSMDAQKRFCKLKGILARA
268	3.97E-15	89100074 ref 89085164 gb	ZP_01172943.1 EAR64296.1	thioredoxin peroxidase thioredoxin peroxidase	Bacillus sp. NRRL B-14911 Bacillus sp. NRRL B-14911	LGNEVKEVTSVVPISDITGVCDAAQTRTVSVDAQKRWCELRLLARZ
269	7.81E-14	71281238 ref 71146978 gb	YP_270247.1 AAZ27451.1	antioxidant, AhpC/TSA family antioxidant, AhpC/TSA family	Cowellia psychrethraea 34H Cowellia psychrethraea 34H	YVTSVPSLDTGVCSIQTKEEAAKL TISNDAQKRFCDMGLLTRA
270	0	50120917 ref 49611443 emb	YP_050084.1 CAG74891.1	thiol peroxidase thiol peroxidase	Erwinia carotovora subsp. Erwinia carotovora subsp.	NIFPSIDTGVCAASVRCISSDAQSRFCCEGIENNVGVALKGLTARA
271	3.88E-16	25027697 ref 30316167 sp 23492979 dbj	NP_737751.1 Q8FQH8 BAC17951.1	putative thioredoxin peroxidase TPX_COREF Probable thiol peroxidase putative thioredoxin peroxidase	Corynebacterium efficiens YS-314 Corynebacterium efficiens YS-313 Corynebacterium efficiens YS-314	NIFPSVDTGLCAESVRFNAEAACYSKDALGRFCGLDLKGLLARS
272	4.36E-20	157738810 ref 157693664 gb	YP_001489493.1 ABV68824.1	thiol peroxidase thiol peroxidase	Arcobacter butzleri RM4018 Arcobacter butzleri RM4018	EVTVVVPSLDTGVCACTETRVVSMDDMKRRCCEGIENLLAGLTARA
273	3.34E-21	67918177 ref 67784233 gb	ZP_00511778.1 EAM4361.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Malonaldehyde peroxidase	Chlorobium limicola DSM 245 Chlorobium limicola DSM 245	TVTNIFPSLDTAVCAASVRCISADAHKRFCEGIENNVKGLLARA
274	0	27802131 gb	AAO21122.1	putative thiol peroxidase	Mycobacterium avium	NIFPSIDTPVCATSVRAGAGATNYSKDAQARFCGVITMAGLLARA

275	0	157370856	ref	YP_001478845.1 ABV4:17.17.1	Redoxin domain protein Redoxin domain protein	Serratia proteamaculans 568 Serratia proteamaculans 568	NIIPSIDTGVCATSVRGLDCISADAGSRFCRGAEFKLAGLTARA
276	2.60E-13	150391465	ref	YP_001321514.1 ABR4:9855.1	Redoxin domain protein Redoxin domain protein	Alkaliphilus metalliredigens QYMF Alkaliphilus metalliredigens QYMF	VVTIGNEIKSVVPSLDTGVGEFQTTTVSVDAQKRFCELRLLSRG
277	0	83312975	ref	YP_4232339.1 BAE5:2680.1	Peroxioredoxin Peroxioredoxin	Magnetospirillum magneticum AMB- Magnetospirillum magneticum AMB-	GLDNIFPSIDTPVCAASVRCVSADAHKRFCEGLERYLAGLLARA
278	6.23E-16	33358145	pdb	1PSQ 1PSQ	A Chain A, Structure Of A Probable Thiol Peroxidase From B Chain B, Structure Of A Probable Thiol Peroxidase From	Streptococcus Pneumoniae Streptococcus Pneumoniae	VSFTGKSVVPSIDTIGICSTQTRGLDVTVSDLAQKRWCEWHLLARA
279	7.75E-15	56421322	ref	YP_148640.1 BAD7:7072.1	thiol peroxidase (superoxide-inducible protein 8) thiol peroxidase (superoxide-inducible protein 8)	Geobacillus kaustophilus HTA426 Geobacillus kaustophilus HTA426	EVTSVVPVSLDTGVCDQAQTRTISVDAQKRWCAAGIENVELRLLARA
280	6.28E-12	118581306	ref	YP_902556.1 ABL00499.1	Redoxin domain protein thiol peroxidase (atypical 2-Cys peroxioredoxin)	Pelobacter propionicus DSM 2379 Pelobacter propionicus DSM 2379	TVTCTVPSLDTPVGDTEITREAAANKTISQDAGRWCELMILLARA
281	1.97E-12	46579639	ref	YP_010447.1 YP_967276.1 AAS9:5706.1 120563105	thiol peroxidase Redoxin domain protein thiol peroxidase thiol peroxidase (atypical 2-Cys peroxioredoxin)	Desulfovibrio vulgaris subsp. Desulfovibrio vulgaris subsp. Desulfovibrio vulgaris subsp. Desulfovibrio vulgaris subsp.	GLTSAVPVSLDTGVCDMETREANLGTVSCDAQARWCELRLLTR
282	3.44E-16	84360702	ref	ZP_00985397.1 EAY6:9790.1	COG2077: Peroxioredoxin Peroxioredoxin	Burkholderia dolosa AUO158 Burkholderia dolosa AUO158	ASFAGKNIIVPSLDTPTTCATSTRVVSQDAAATRFQGVDLINGLTARA
283	3.44E-21	38233948	ref	NP_939715.1 CAE4:9890.1	thiol peroxidase thiol peroxidase	Corynebacterium diptheriae NCTC Corynebacterium diptheriae	ESAVEITNIFPSIDTGVCAQSVRCASADAHRSFCGLDKLGLLARA
284	3.15E-15	90021199	ref	YP_527026.1 ABD8:0814.1	thiol peroxidase thiol peroxidase (atypical 2-Cys peroxioredoxin)	Saccharophagus degradans 2-40 Saccharophagus degradans 2-40	TVTINIFVSDTGTTCATSVRASLENTCVSLDALGRFCLAGLYSRS
285	3.85E-16	148878467	ref	ZP_01814941.1 EDK2:7654.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma	Vibrionales bacterium SWAT-3 Vibrionales bacterium SWAT-3	NIIPSIDTATCATSVRCISADAAAGRFCEGIEVLAGLTTRAVVT
286	2.98E-13	125717135	ref	YP_001034268.1 ABN4:3718.1	thiol peroxidase Thiol peroxidase, putative	Streptococcus sanguinis SK36 Streptococcus sanguinis SK36	SIIPSIDTGVCSQTQRTVSVDAQGWCEGIENAEWHLLARATVT
287	2.57E-12	156741029	ref	YP_001431158.1 ABU5:7140.1	Redoxin domain protein Redoxin domain protein	Roseiflexus castenholzii DSM 13941 Roseiflexus castenholzii DSM 13941	SVIIPSIDTGVCSKQTRTVSADAAQGRWCVGDGAAFGTDAALAAL
288	0	34557922	ref	NP_907737.1 CAE1:0637.1	PUTATIVE THIOL PEROXIDASE-SCAVENGASE P20 OXID PUTATIVE THIOL PEROXIDASE-SCAVENGASE P20 OXID	Wolinella succinogenes DSM 1740 Wolinella succinogenes	GGTNVVPVSLDTGVCATQTRVVSMDAQQGRFCEGIENLAGVTAR
289	2.20E-15	24379369	ref	NP_721324.1 Q8DUK3 30916154	thiol peroxidase TPX_STRMU Probable thiol peroxidase AE014933_4 thiol peroxidase	Streptococcus mutans UA159 Streptococcus mutans UA159	TTFNGNGDTSVVPVPSIDTGVCDQAQTRTVSVDAQARWCEHLGLGR
290	0	68249348	ref	YP_248460.1 ZP_01787839.1 AAX8:7800.1 EDJ9:3541.1	probable thiol peroxidase probable thiol peroxidase probable thiol peroxidase probable thiol peroxidase	Haemophilus influenzae 86-028NP Haemophilus influenzae 3655 Haemophilus influenzae 86-028NP Haemophilus influenzae 3655	NIIPSIDTGVCATSVRCISADAAQARFCEGIENAGVLDLAGLTSRA
291	2.03E-10	401552	sp	P31307 AAA5:3078.1	TPX_STRPA Probable thiol peroxidase ORF3; codes for 20 kD protein	Streptococcus parasanguinis Streptococcus parasanguinis	PVTSIIPSIDTIGICSMQTRTVSVDAQGWKWCCEGLDIAEWHLLARA
292	9.54E-19	119896397	ref	YP_931610.1	probable thiol peroxidase	Azoarcus sp. BHT2	ESAPAFGLDNVPSLDTPTTCATSTRVSGDAAAKRFCLAGLTARA



		119668810	emb	CAL92723.1	probable thiol peroxidase		Azoarcus sp. BH72	
293	8.37E-20	160882643	ref	ZP_02063646.1	hypothetical protein BACOVA_00596		Bacteroides ovatus ATCC 8483	NIFPSLDTSVCATSVRAISKDAHGHRFCEGIENVGVRLAGLLARA
		156111958	gb	EDO13703.1	hypothetical protein BACOVA_00596		Bacteroides ovatus ATCC 8483	
294	3.68E-16	134294688	ref	YP_001118423.1	Redoxin domain protein		Burkholderia vietnamiensis G4	ASFAGKNIVPSLDTPTCATSTRVVSQDAATRFQGVDLNGLTARA
		134137845	gb	ABO63588.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Burkholderia vietnamiensis G4	
295	7.38E-19	120556703	ref	YP_961054.1	Redoxin domain protein		Marinobacter aquaeolicus VT8	NVTSGLLEEVNIPSIDTGVCAASTRYVISADAASRFCLAGLCARA
		120326552	gb	ABM20867.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Marinobacter aquaeolicus VT8	
296	2.65E-15	16080001	ref	NP_390827.1	thiol peroxidase		Bacillus subtilis subsp. subtilis str.	KVTSVIPSIDTGVCDAGTRTISADAQAARWCELLRLARSEAAKAL
		6094509	sp	P80864	TPX_BACSU Probable thiol peroxidase (Superoxide-inducible)		Bacillus subtilis	
		2293238	gb	AA00316.1	YigI		Bacillus subtilis	
		2635433	emb	CAB14927.1	thiol peroxidase		Bacillus subtilis subsp. subtilis str.	
297	1.77E-15	121997983	ref	YP_001002770.1	Redoxin domain protein		Halorhodospira halophila SL1	NIVPSLDTVCGASAKGVTTYSADQAQRFCMEGLCARAEIAEEP
		121589388	gb	ABM61968.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Halorhodospira halophila SL1	
298	1.72E-21	66045717	ref	YP_235558.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma		Pseudomonas syringae pv. syringae	QVTNIFVSDTPTCATSVRCISADAQAARFCEGIENVLAGLTARA
		63256424	gb	AAV37520.1	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Ma		Pseudomonas syringae pv. syringae	
299	0	21958817	gb	AAIM8556.1	AE013802_1 thiol peroxidase		Yersinia pestis KIM	SSFAGKNIFPSIDTGVCAASVRCISSDAQSRFCGVVALAGLTARA
		45436785	gb	AAS62338.1	thiol peroxidase		Yersinia pestis biovar Microtus str.	
300	0	121527938	ref	ZP_01660552.1	putative thiol peroxidase-scavengase P20 oxidoreductase p		Ralstonia pickettii 12J	VGADLKNIVPSLDTVPCATSTRISADAAGRFQGVDLAGVTARA
		121304708	gb	EAX45670.1	putative thiol peroxidase-scavengase P20 oxidoreductase p		Ralstonia pickettii 12J	
301	1.23E-12	145628366	ref	ZP_01784167.1	probable thiol peroxidase		Haemophilus influenzae 22.1-21	MTVTLAGNEVGLVNDNIFPSIDTGVCATSVHISADLPAQARFL
		144980141	gb	EDJ89800.1	probable thiol peroxidase		Haemophilus influenzae 22.1-21	
302	0	17547509	ref	NP_520911.1	PROBABLE THIOL PEROXIDASE-SCAVENGASE P20 OXI		Ralstonia solanacearum GMI1000	GGALPSNIVPSLDTVPCATSTRISADAAGRFQGVDLAGLTARA
		24212517	sp	Q8XVP0	TPX_RALSO Probable thiol peroxidase			
		17429812	emb	CAD16497.1	probable thiol peroxidase oxidoreductase protein		Ralstonia solanacearum	
303	8.18E-13	89072146	ref	ZP_01158742.1	thiol peroxidase		Photobacterium sp. SKA34	QVTNIFPSIDTVPVICALGVKCSADATGRFCEFAEAYLRDLATRA
		89052247	gb	EAR57698.1	thiol peroxidase		Photobacterium sp. SKA34	
304	1.56E-13	145619142	ref	ZP_01775195.1	Redoxin domain protein		Geobacter bemiensis Bem	SAVPSLDTVPGDTEITRTISADAQAQRKRCVVTTELKLSRSEALRA
		144944635	gb	EDJ79707.1	Redoxin domain protein		Geobacter bemiensis Bem	
305	8.50E-14	15792117	ref	NP_281940.1	probable thiol peroxidase		Campylobacter jejuni subsp. jejuni	EVGADGKTLVSPSLDTPVCA TEARNGAEVIAMGRFQLEGLLARA
		86150249	ref	ZP_01068476.1	thiol peroxidase		Campylobacter jejuni subsp. jejuni	
		86152164	ref	ZP_01070376.1	thiol peroxidase		Campylobacter jejuni subsp. jejuni	
		86597562	ref	ZP_01100796.1	thiol peroxidase		Campylobacter jejuni subsp. jejuni	
		11134997	sp	Q9PPE0	TPX_CAMJE Probable thiol peroxidase		Campylobacter jejuni	
		85839365	gb	EAQ56627.1	thiol peroxidase		Campylobacter jejuni subsp. jejuni	
		85840949	gb	EAQ58199.1	thiol peroxidase		Campylobacter jejuni subsp. jejuni	
		88190154	gb	EAQ94129.1	thiol peroxidase		Campylobacter jejuni subsp. jejuni	
		112360113	emb	CAL34907.1	thiol peroxidase		Campylobacter jejuni subsp. jejuni	
306	0	146311803	ref	YP_001176877.1	thiol peroxidase		Enterobacter sp. 638	LVAKDDVTNIFPSIDTGVCAASVRSISADLPAQSRFCLKGLTARA
		145318679	gb	ABP60826.1	thiol peroxidase (atypical 2-Cys peroxiredoxin)		Enterobacter sp. 638	
307	5.45E-10	154174915	ref	YP_001409037.1	thiol peroxidase (Scavengase P20)		Campylobacter curvus 525.92	VVGKDGVVAVPVS LDTDVCAMEAKAMGRFCEGIENVLTGLTAR
		112804065	gb	EALU01409.1	thiol peroxidase (Scavengase P20)		Campylobacter curvus 525.92	
308	0	110735219	gb	ABG89180.1	thiol peroxidase Tpx		Mannheimia haemolytica	NIFPSIDTGVCATSVRCISADAQAARFCEGIENVAGVDLAGLTSRS

	153095022.gp	EDN75577.1	thioredoxin peroxidase	Mannheimia haemolytica PHL213
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Hit#	p-value	gi number	db	protein accession	Name	Species	Active Site Signature
1	1.62E-12	50954926	ref	YP_062214.1	AhpC/TSA family protein	<i>Leifsonia xylii</i> subsp. <i>xylii</i> str. CTCB07	VFFPLAFSGTGCQGLCVSDTLRAWEEHIEGYVFLKGFANRA
		50951408	gb	AA189109.1	AhpC/TSA family protein	<i>Leifsonia xylii</i> subsp. <i>xylii</i> str. CTCB07	
3	3.16E-18	134098120	ref	YP_001103781.1	member of AhpC/TSA family	<i>Saccharopolyspora erythraea</i> NRRL 2338	VFYPPAFSGICQGLCVSDALKAWAEQEGYVFNAGWANRG
		134910743	emb	CAM100886.1	member of AhpC/TSA family	<i>Saccharopolyspora erythraea</i> NRRL 2338	
5	4.96E-13	21220837	ref	NP_626616.1	thiol-specific antioxidant protein	<i>Streptomyces coelicolor</i> A3(2)	IQVGLFYPPFAFTGVCTGELCVSNLRLVFAEQEGLKGC AVR
		8246810	emb	CAB92845.1	putative thiol-specific antioxidant protein	<i>Streptomyces coelicolor</i> A3(2)	
6	0	111018206	ref	YP_7011178.1	probable thioredoxin-dependent thiol peroxidase	<i>Rhodococcus</i> sp. RHA1	VFYPLAFTGTCQGEICLSVGTGTHKIWSAEQGYVFNLFANRG
		110817736	gb	ABG93020.1	probable thioredoxin-dependent thiol peroxidase	<i>Rhodococcus</i> sp. RHA1	
7	5.76E-20	118473680	ref	YP_888595.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Mycobacterium smegmatis</i> str. MC2 155	VFFPLAFTGVCEGELGVSVGTGTHKIWSIESGTFVFNAGYPNRG
		118174967	gb	ABK75863.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Mycobacterium smegmatis</i> str. MC2 155	
9	0	111224431	ref	YP_715225.1	Peroxioredoxin	<i>Frankia alni</i> ACN14a	LFYPLTFTGVCGELCVSDAHKVAEQQGYIFNRSISVRG
		111151963	emb	CAJ63685.1	Peroxioredoxin	<i>Frankia alni</i> ACN14a	
10	0	86741739	ref	YP_482139.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Frankia</i> sp. Ccl3	LFYPLTFTGVCGELCVSDAHKVAEQQGYVFNRSISLRG
		86568601	gb	ABD12410.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Frankia</i> sp. Ccl3	
11	0	15609375	ref	NP_216754.1	Probable peroxiredoxin AhpE	<i>Mycobacterium tuberculosis</i> H37Rv	VFFPLAFTGICQGEICLISVGTGTHKIWATQSGVFNAGIANRG
		15841731	ref	NP_336768.1	AhpC/TSA family protein	<i>Mycobacterium tuberculosis</i> CDC1551	
		31793418	ref	NP_855911.1	peroxiredoxin AhpE	<i>Mycobacterium bovis</i> AF212297	
		81253788	ref	ZP_00878321.1	COG1225: Peroxioredoxin	<i>Mycobacterium tuberculosis</i> C	
		121638120	ref	YP_978344.1	peroxiredoxin AhpE	<i>Mycobacterium bovis</i> BCG str. Pasteur	
		148662059	ref	YP_001283582.1	AhpC/TSA family protein	<i>Mycobacterium tuberculosis</i> H37Ra	
		148823446	ref	YP_001288200.1	peroxiredoxin AhpE	<i>Mycobacterium tuberculosis</i> F11	
		54040483	sp	P65689	Y2262_MYCBO Putative peroxiredoxin Mb2262c (Thior)	<i>Mycobacterium bovis</i>	
		54042941	sp	P65688	Y2238_MYCTU Putative peroxiredoxin Rv2238c(MT229)	<i>Mycobacterium tuberculosis</i>	
		61680453	pdb	1XXU	A Chain A. Crystal Structure Of Ahpe From <i>Mycobacter</i>	<i>Mycobacterium tuberculosis</i>	
		61680460	pdb	1XXU	B Chain B. Crystal Structure Of Ahpe From <i>Mycobacter</i>	<i>Mycobacterium tuberculosis</i>	
		61680461	pdb	1XXU	C Chain C. Crystal Structure Of Ahpe From <i>Mycobacter</i>	<i>Mycobacterium tuberculosis</i>	
		61680462	pdb	1XXU	D Chain D. Crystal Structure Of Ahpe From <i>Mycobacter</i>	<i>Mycobacterium tuberculosis</i>	
		1261910	emb	1261910	Probable peroxiredoxin AhpE	<i>Mycobacterium tuberculosis</i> H37Rv	
		13881989	gb	AAK46582.1	AhpC/TSA family protein	<i>Mycobacterium tuberculosis</i> CDC1551	
		31619010	emb	CAD97115.1	peroxiredoxin AhpE	<i>Mycobacterium bovis</i> AF212297	
		121493768	emb	CAL72243.1	peroxiredoxin AhpE	<i>Mycobacterium bovis</i> BCG str. Pasteur	
		124601450	gb	EAY60460.1	peroxiredoxin AhpE	<i>Mycobacterium tuberculosis</i> C	
		134150547	gb	EBA42592.1	peroxiredoxin AhpE	<i>Mycobacterium tuberculosis</i> str. Haarlem	
		148506211	gb	ABQ74020.1	AhpC/TSA family protein	<i>Mycobacterium tuberculosis</i> H37Ra	
		148721973	gb	ABR06598.1	peroxiredoxin AhpE	<i>Mycobacterium tuberculosis</i> F11	
12	2.08E-15	72162363	ref	YP_290020.1	putative thiol-specific antioxidant protein	<i>Thermobifida fusca</i> YX	VFYPLAFSGICDKELRISVDAHRVWADREGVWFDKGVALRG
		71916095	gb	AAZ55997.1	putative thiol-specific antioxidant protein	<i>Thermobifida fusca</i> YX	
13	0	118617010	ref	YP_905342.1	peroxiredoxin AhpE	<i>Mycobacterium ulcerans</i> Agy99	VFFPLAFTGICQGEICLISVGTGTHKIWATQSGVFNAGISNRG
		118569120	gb	ABL03871.1	peroxiredoxin AhpE	<i>Mycobacterium ulcerans</i> Agy99	
14	2.53E-12	119963106	ref	YP_948159.1	putative bacterioferritin comigratory protein (thioredoxin)	<i>Arthrobacter aureus</i> ens TC1	TEVQQAPASGLVFFFPFAFSGICTGELCVSDSGMALRGVWN
		119949965	gb	ABM08876.1	putative bacterioferritin comigratory protein (thioredoxin)	<i>Arthrobacter aureus</i> ens TC1	
20	0	108800325	ref	YP_640522.1	Redoxin	<i>Mycobacterium</i> sp. MCS	VFFPLAFTGICQGEICLISVGTGTHKIWATQSGVFNAGIANRG
		119869453	ref	YP_939405.1	Redoxin domain protein	<i>Mycobacterium</i> sp. KMS	
		126435948	ref	YP_001071639.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Mycobacterium</i> sp. JLS	
		108770744	gb	ABG09486.1	Redoxin	<i>Mycobacterium</i> sp. MCS	
		119695542	gb	ABL92615.1	Redoxin domain protein	<i>Mycobacterium</i> sp. KMS	
		126235748	gb	ABN99148.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Mycobacterium</i> sp. JLS	
21	0	159039144	ref	YP_001538397.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Salinispora arenicola</i> CNS-205	IEYGVFPLAFTGVCQGEICLCAHKWADREGVYFNAGIANRG
		157917979	gb	ABV99406.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Salinispora arenicola</i> CNS-205	
22	3.45E-14	148272804	ref	YP_001222365.1	putative thiol-specific antioxidant protein	<i>Clavibacter michiganensis</i> subsp.	VFFPLAFSGTGMCMCISVDTLRAWAQQQGVFLKGFANRA
		147830734	emb	CAN01674.1	putative thiol-specific antioxidant protein	<i>Clavibacter michiganensis</i> subsp.	
23	0	41408089	ref	NP_960925.1	AhpE	<i>Mycobacterium avium</i> subsp.	VFFPLAFTGICQGEICLISVGTGTHKIWALESGVFNAGYSNRG
		41396444	gb	AAS04308.1	AhpE	<i>Mycobacterium avium</i> subsp.	
24	1.30E-10	84496763	ref	ZP_0095617.1	putative thiol-specific antioxidant protein	<i>Janibacter</i> sp. HTCC2649	VFYPWAFSGICTGELTSCDSLRAYADRDG VYFDAGVARRG
		84383531	gb	EAP99412.1	putative thiol-specific antioxidant protein	<i>Janibacter</i> sp. HTCC2649	
26	0	145223371	ref	YP_001134049.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Mycobacterium gilvum</i> PYR-GCK	VFFPLAFTGICQRELDISVGHVHWATQRYVFNAGYVNTGFSNRG
		145215857	gb	ABP45261.1	alkyl hydroperoxide reductase/Thiol specific antioxidant	<i>Mycobacterium gilvum</i> PYR-GCK	
27	0	54023578	ref	YP_117820.1	hypothetical protein nfa16100	<i>Nocardia farcinica</i> IFM 10152	VFYPLAFTGVCGELCVSIVGTGTHKWAEEQGYVFNAGSFGANRG

28	0	54015086 dbj BAD56456.1	hypothetical protein	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Nocardia farcinica</i> IFM 10152	IDVGVFPLAFSGVCGGELCSHKIWANQEGYVFNNGGIANRG
		145595882 ref YP_001160179.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Salinispora tropica</i> CNB-440		
		145305219 gb ABP55801.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Salinispora tropica</i> CNB-440		
31	4.78E-13	29832345 ref NP_826979.1	thiol-specific antioxidant protein	<i>Streptomyces avermitilis</i> MA-4680		IQVGLFYPFAFTGYCTGELCVSNTLLRVFAEQEGLKGCVRG
		29609464 dbj BAC73514.1	putative thiol-specific antioxidant protein	<i>Streptomyces avermitilis</i> MA-4680		VFFPLAFTGICQQGELDISVGTTHRIWALESGFVFNAGYSNRG
32	0	118462931 ref YP_881408.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Streptomyces avermitilis</i> MA-4680		
		118164218 gb ABK65115.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Mycobacterium avium</i> 104		
33	0	158313700 ref YP_001506208.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Mycobacterium avium</i> 104		LFYPLTFTGVCQGGELCISVDAHKKVWADQQQGYVFNKGISLRG
		158109105 gb ABW11302.1	alkyl hydroperoxide reductase/ Thiol specific antioxidant	<i>Frankia</i> sp. EAN1pec		
35	1.98E-26	120404708 ref YP_954537.1	Redoxin domain protein	<i>Frankia</i> sp. EAN1pec		VFFPLAFTGICQRELDISVGTTHKVMWATERGYVFNNSGFANRG
		119957526 gb ABM14531.1	Redoxin domain protein	<i>Mycobacterium vanbaalenii</i> PYR-1		
36	1.66E-10	116671008 ref YP_831941.1	Redoxin domain protein	<i>Mycobacterium vanbaalenii</i> PYR-1		VFYPPFAFTSGICTGELCLSVDPHGAVAAQYGVSGMAGRGVVN
		116611117 gb ABK03841.1	Redoxin domain protein	<i>Arthrobacter</i> sp. FB24		
37	1.19E-21	61680453 pdb 1XVW	A Chain A, Crystal Structure Of Ahpe	<i>Arthrobacter</i> sp. FB24		VFFPLAFTGIQGGELDQDISVGTTHKIWATQSGFVFNAGIANRG
		61680454 pdb 1XVW	B Chain B, Crystal Structure Of Ahpe	<i>Mycobacterium Tuberculosis</i>		