

***** ** . * *

WP_000400612/1-640	31	...	LPGGFVGV	DI	FFV	ISGYL	ITSIILKSAS	.NK.S...	FSYLDIFYKRRVLR	IF	.PALSI	.VLVSCL	.IVGWY	.LFQ.D	.D.DY	.KLLG..	KH...VF.
WP_000639473/1-609	32	...	SGGFVGV	DV	FFV	ISGFLM	TGIVLERVD	.H.....	KGVLDFYIARFLR	IV	.PALVF	.AILLLM	.IFGLFT	.LST.N	.EY.EALS	..KN...AI.	
SIU02679/1-640	31	...	LPGGFVGV	DI	FFV	ISGYL	ITSIILKSAS	.SN.S...	FSYVEFYKRRILR	IF	.PALSI	.VLISCI	.IIGWVY	.FFQ.D	.DY.KSLG	..KH...VF.	
AAX87447/1-622	30	...	WLSGGFLG	VDI	FFV	ISGFLI	TGIIITEIQ	.QN.S...	FSLKQFYTRRIKR	IY	.PAFIT	.VMALVS	.FIASVI	.FIY.N	.DF.NKLR	..KT...IE.	
CAC99369/1-622	35	...	WAKGGFVGV	DI	FFV	LSGYL	ITNILLTQWEKNQ	.S...	LQLKQFWIRRFRR	LI	.PAVYV	.MIVVVV	.I.YSV	.FFH.P	.EILKNLR	..GD...AI.	
WP_002245844/1-622	30	...	WLPGGFLG	VDI	FFV	ISGFLI	TGIIILSEIQ	.NG.S...	FSDRFYTRRIKR	IY	.PAFIA	.AVSLAS	.VIASQI	.FLY.E	.DF.NQMR	..KT...VE.	
WP_011101182/1-660	51	...	SLQGGYLV	PI	FFV	VSGYL	ITDILLQDILSRG	.H...	VRIWRFLGHRMRR	LY	.PAFVT	.MLLGT	.T.A.YIT	.LFQ.R	.SLLTNR	..AT...VL.	
YP_004888877/1-615	26	...	QFTGGFVGV	DI	FFV	ISGFLI	TSLMVDEFARSD	.N...	FKLMAFYGRRFYR	IV	.PPLFI	.AVLLVL	.P.LTY	.LID.H	.DFVTDIG	..KQ...VA.	
WP_000379821/1-603	41	...	WLSGGFLG	VDT	FFV	ISGYL	ITSLLEISEYYRTQ	.K...	IDLLEFWKRRLLKR	LI	.PAVLF	.LICVVL	.T.FTL	.IFK.P	.ELIQMK	..RD...AI.	
WP_021723064/1-605	28	...	HVQGGFLG	VVL	FFV	LSGYL	VTDSLLREYEKKN	.K...	INIWQFWGRRLKR	LY	.PLLIA	.IFLLVT	.P.YII	.IFQ.P	.NLWAGLR	..SN...FL.	
WP_001220853/1-605	26	...	IFPGGFFGV	DV	FFV	ISGFLI	TALLIEEFSKNN	.E...	IDLIGFFRRFYR	IV	.PPVVL	.MVLVTM	.P.FTF	.LVR.Q	.DYVAGIG	..GO...IA.	
WP_003687310/1-624	31	...	WLPGGFLG	VDI	FFV	ISGFLM	TAILLREMS	.GG.R...	FFLKTIFYIRRIKR	IL	.PAFFA	.VLAATL	.AGGFFL	.FTK.D	.DF.FLLW	..KS...AL.	
YP_031545/1-343	43	N.	LFESISRAS	VPI	FVM	ISGALL	LLKGTKD	.....	ISVGEFLQKRASKV	I	IPFIAW	.SAIFYA	.YGAYAG	.YFP.A	.S.....	.....
WP_010975904/1-335	29	..	HHFTIGAAG	VDF	FFV	ISGFIM	WVVIS	...DRR.S...	VTPVEFIADRARR	IV	.PVYWL	.ATGVMV	.AG.ALA	.GLF.P	.NLVLT	...EH...VL.	
WP_011037591/1-364	55	..	MTLFAYSFH	VPL	FFL	VSGWL	AAGYASRT	.....	TSLLOTITKQARG	LLL	PYVVF	.YLLGYV	...YW	.LLT.R	.NI.GE	...K.
AAA86375/1-379	48	..	YKLFAYSFH	VPL	FFV	LSGWV	GERFGRA	.....	FG.RKTVGLKART	LL	IPYVSF	.FLVAYG	...YW	.ILS.A	.VL.NG	...T.
AAA75102/1-357	40	G.	KQLPFQSLAV	NA	FFW	LSGFLI	ITYHCITK	...K.P...	YTFAYEMIDRF	CR	IY	.VIYIP	.VLILSV	...FL	.LAK.A	.DL.ASMPELKE	...WV.
P08888/1-367	48	DLL	..FSAPGVA	IFL	FFL	ISGFLV	TDSYIRS	.....	SSAASFFVKRSLR	IF	.PALFV	.NIAVME	.LA.LLV	.TGG.L	.NV.T	...G...IL.
Q52778/1-373	59	..	YFKSIYMFH	MPL	FMA	ISGYL	SSGAILR	.....	KSFTQGVGERAMQ	LLL	PMLFW	.CTLIWT	.LKS.AV	.IFP.MKS	.....	.....
P23214/1-333	35	F.	GFESAGGIA	VII	FFS	ISGYL	ISKSAIRS	.....	DSFIDMAKRARR	IF	.PALVP	.CSILTYFL	FGWILNDFS	.A.E	.....	.....
WP_009895914/1-394	47	..	QRTFFFWGG	VDL	FFC	ISGYV	ITGNLLRRLTP	.SGRQCGFGAFAIPFWIRRAWR	IL	.PSAWL	.WLAIPL	.IL.SVV	.ANR.T	.GYLGTPT	..GNMIDSL	..	
WP_004545264/1-394	47	..	QRAFFFWGG	VDL	FFC	ISGYV	ITGNLLRRLTP	.SGRQGGFGAFAIPFWIRRAWR	IL	.PSAWL	.WLAAPL	.IL.SVV	.ANR.T	.GYLGTPT	..GNIIDAL	..	
NP_706267/1-390	77	N.	LLANLQGV	VSE	FFM	ITGYL	FFSKIIS	...G.D...	QDWTRLYVSRLLR	LT	.PMFIV	.SLCLIF	.I.IVG	..FK.S	.GWRM	...Q...VS.	
EFW62204/1-382	75	N.	LLTNLQGV	VSE	FFM	ITGYL	FFSKIRS	...S.D...	QDWVRLYISRFLR	LT	.PMFIV	.SLCLVL	.L.VIG	..FK.S	.RWSV	...H...VS.	
WP_000282635/1-349	40	..	LYPFVFSYH	VPL	FFA	AAGFFT	TIKKN	...D...	LSVFDYIKSKFYR	LM	IPYFTF	.AFSILI	.I.NTI	.NSG.E	.TI.DYIY	..NH...IY.	
Q54131/1-367	39	..	VYYAYLFH	MPL	FFH	IGGVLY	KDTRC	.....	ITNFTAHVIKKQ	QL	.PYLIV	.TYLIIG	.S.IAL	.LIN.V	.RY.GIHT	..GD...AF.
WP_004194788/1-412	79	L.	NQDSMGGIC	VSG	FFA	ISGFLI	AKSGMRA	.....	DALQFAWRR	CVR	IF	.PAYWA	.VLIVTALCV	GPIIHVQ	.A.GTLHGYW	..NA...ALG
WP_001230914/1-332	40	A.	YLYLGTYS	IPL	FFM	VNGYLL	LLGKRE	.....	ITYL.YILQ	KV	.KWILI	.TVSSWS	.F.IVW	.LFK.R	.DF.TTN	.....
WP_000170108/1-342	44	F.	LIAQIYIFH	IPV	FFA	LSGYF	FRPVS	.....	LKEFWYYAKK	KT	.IILGI	.PYIFYS	.I.IHF	.CLQ.K	.LA.GAS	..V.....
P37669/1-331	44	N.	VLNSASRVS	VPL	FFM	ISGYL	FFGERSA	.....	QPRHFLR	IG	.LCLIFYSAI	ALL...YIA	.LFTSI	.NM.ELAL	..KN...LL.	..
Q70J69/1-422	59	HVLF	SRAGGTA	VSC	FFL	LSGFV	LAYIARPG	.....	DSTRSFYRRRIAK	IY	.PVHLI	.STAVAF	.I...LV	.SVR.Y	.EV.PGM	...EV...TL.

WP_000400612/1-640	163	HNR...NIV...LS	CAT.IFII...SYA.I...SIF.TM...AS...D.G...GA...NYYSP...A...
WP_000639473/1-609	161	.P...VGL...SL	SV.ILAM...SLA.I...TLM.RV...TG...T.K...ED...IFYLI...P...
SIU02679/1-640	163	SKR...NIL...LS	CAA.IFIV...SYT.I...SVF.TM...AY...E.G...GA...NYYSP...A...
AAx87447/1-622	163	.EI...KVL...FI	ITL.ILFF...ILLA.T...SFI.PA...NFYKEVLH.Q...PN...IYYLS...N...
CAC99369/1-622	169	NPK...LLL...KI	VIG.LGLLSAVWMT.I...LYV.PG...T...D.P...SR...VYYGT...D...
WP_002245844/1-622	163	.SL...RVL...RN	ISI.ILFL...ILTA.T...SFL.PS...GFYTDILN.Q...PN...TYYLS...T...
WP_011101182/1-660	185	KRS...RVF...WF	MMI.AAGISAITMA.M...LY.DP...A...N.T...NR...VYYGT...D...
YP_004888877/1-615	159	RLASGRRALTRFRWGLGL	TTAFAIESFVMY.F...GAV.GL...K...D.F...SP...VYFSS...L...
WP_000379821/1-603	174	PRN...IIQ...T	LFI.VSLISLGLMI.V...IHF.IT...G...D.N...SR...VYFGT...D...
WP_021723064/1-605	162	KRG...RIF...VI	ANL.LALISAIWMA.I...LFV.PG...A...D.P...TR...VYYGT...D...
WP_001220853/1-605	159	SNG...QL...KGMVFL	LSAVAF LISFFSMF.I...GSF.LV...T...S.Y...SS...VYFSS...L...
WP_003687310/1-624	164	.RV...QFG...F	LAA.LCAL...SLA.A...SFM.PS...AL...D...KYYLP...H...
YP_031545/1-343	151	.RE...IEY...F	LIL.WLYA...SVV.VNLVKYYY.PI...NF...NI...ELFYVT...N...
WP_010975904/1-335	146	RNW...RPL...VV	SG..LFLALV..IA...GRV.VA...F...D.D...AV...MLTYT...R...
WP_011037591/1-364	171	...PPL...V	IAA.VAVV...LAW.F.WMNWF.PL...QH...MR...LFWGL...D...
AAA86375/1-379	163	...SAA...V	LAV.CSLL...VVW.A.WTRWF.PG...LR...LR...LPPFAL...D...
AAA75102/1-357	171	.RL...IMS...IL	I.I.PAL...LVA.G...YFT.LK...EY...LPFAL...D...
P08888/1-367	182	.AG...ALV...VA	VAA...LG.SWVMA...QHF.NI...T...D.K...YNPFLSVT...A...G...
Q52778/1-373	160	.RL...SIW...I	ISA.S...AIAVAF.PI...TL...SIT...PL...LKY...LKY...
P23214/1-333	162	.GK...AFI...V	IL.LV...FVS.L...SLIGS...VS...E.N...RD...VMFSIPLWLYP...
WP_009895914/1-394	186	.IM...PIL...CV	VV...LI.Q...VFL.PR...PI...LSFLW...F...
WP_004545264/1-394	186	.IA...PIL...CV	VV...LI.Q...VFL.PR...PI...LSFLW...F...
NP_706267/1-390	208	IY...M...VM	ISA.ISL VFIL...F.FS...K...
EFW62204/1-382	206	IH...M...II	ISV.LVLVIFLC...YPSK...K...
WP_000282635/1-349	147	.NN...IVI...LI	ISL.LSFM..LSQT.V...LNHN.PL...L...D...PQ...WFWNID...
Q54131/1-367	156	.S...NAL...L	LSV.LVAI...SVL.L...ITV.SI...TY...L.S...PQ...YILVK...DY.K
WP_004194788/1-412	224	.RR...VLL...AV	TV.VAWF...VLA.I...QTINPAFSAQLLPWAG...D.R...HL...VQY...
WP_001230914/1-332	144	...YLY...SL	SL.LMTI...GLI.F...ELS.NI...LL...Q.M...PI...QTYVIQ...TFRL
WP_000170108/1-342	152	...SLF...LV	SV.FAYI...FTLF.I...QI.D...IFIVQ...RT...
P37669/1-331	140	GGK...MLL...VL	MAV.IGII...AN.P...NTV.PQ...KI...D.GFEWLPI...NLYIN...G...
Q70J69/1-422	179	.GM...LYA...VS	ACS.VFLV.FFLPYVVG...HTF.AI...R...S...PDPVEMVPTAGYGGPIGYWFAYVFP...P...

*

WP_000400612/1-640	199	.SR...FWEL...MA	CAIISTL.RFI.GI.NT..SLSKL...M.SL.....LGI.IL.IA.....L...SIT.M..
WP_000639473/1-609	194	.TR...AWEM...LA	GGLVYIA.SVR.YK.MP..EWIKH...C.EV.....YGI.VL.IV.....V...AVV...
SIU02679/1-640	199	.SR...FWEL...MA	GAIATL.RFM.GI.KT..SVSKS...M.SL.....IGV.II.IT.....L...SIA.L..
AAx87447/1-622	204	.LR...FPEL...LV	GSLLAiy.HNL.SA.SK..QASK..Q..ASNv.....IAI.LS...T.LL.LF...S...CLF.L..
CAC99369/1-622	207	.TR...AFDL...LS	GALAFV.WPF.NRLSP..VVPRKS.KAVLNI.....AGT...ISILCF.IL.....F...TAF...
WP_002245844/1-622	204	.LR...FPEL...LA	GSLLAyV.GQT.QNGRR..QTAN..G..KRQL.....LSS.LC...F.GA.LL.....A...CLF.V..
WP_011101182/1-660	222	.TR...MFAI...LL	GSLAFI.WPS.RELSA..DIANVN.RVTLDI.....LGG...ASL.IA.II.....W...IFF.Q..
YP_004888877/1-615	208	.TH...CFPF...FV	GGLIGVL.SGI.KA.QG..PIYRWT.TAH...CNPIIAGAVMLISF.I.L.LV.....A...LGD.R..
WP_000379821/1-603	211	.TR...LQTL...LL	GCILAFI.WPP.FALKK..DISKKI.VVSLDI.....IGI...SGF.AV.LM.....T...LFF.I..
WP_021723064/1-605	200	.TR...FFSL...IM	GSLAFV.WPL.NKLSH..KVNKRAVKIAWQL.....TIG...LSL.LL.LL.....A...YIF...
WP_001220853/1-605	201	.TH...VYPF...FL	GMLATI.VGV.RQ.TT..SLVKQL.DKIWDLRKTLVVFGGGF..GF.LV.LL.....T...FF.F..
WP_003687310/1-624	195	.LR...ACEM...LV	GSLTAVR.MRY.RQQRN.PAVGKR...Y.AA.....VGA...LFSA.CI.LS.....A...CLF.A..
YP_031545/1-343	188	.Y...VGYF...LL	GYYLSNF...DI.SK..KWRNI...S.YI.....GG.F.VGF.....I...STF.FI..
WP_010975904/1-335	180	.PV...ILEF...VA	GMIIGEF.WLK.GRVPP..L...AVGS.ALF.....ACS...LGG.FA.LI.....G...VLG...
WP_011037591/1-364	203	.VL...PVSICFYAL	GALLIHV.SPYLPT.SLP...GS...A..L.....VTV.....VVAALVA
AAA86375/1-379	195	.VL...PVALFFIAV	GAWLSRF.AERV.R.ALPAVVVVV...A.....FPVLAFa
AAA75102/1-357	194	.V...ALVW...FL	GSGCAYH.F.C.NIN...RKYNH...G.IL.....MLS..LITGA.AF.LV.....RFH.V..
P08888/1-367	217	.PT...FWIF...SM	GVLARLY.W.H.RV.SK..IFEGK...LLWWL.....AT...HL.....AITWWVA.G..
Q52778/1-373	189	.T...YPFY...CL	GFLFAQP.IG..WQ.NG..VIWRY...K.WI.....FV.VLLSI.....A...A.....
P23214/1-333	198	.LR...GLAF...FF	GATMAMY.EKS.W...NVSNV...KITV.....VSL.L.AM.....Y...AY.....
WP_009895914/1-394	211	.VR...TDAL...AL	GALLALL.QHR.EW.YA..KVEPRTL..ARGL.....LSA.IALAGM.CL.IL.....A...ALP.G..
WP_004545264/1-394	211	.VR...TDAL...AL	GALLALL.QHR.DW.YA..KVEPRPL..GRGL.....ISA.IALAGM.CI.VL.....A...ALA.G..
NP_706267/1-390	228	.IH...IASF...LF	GL.LAF.LNK.SKIVN..GIAK...AK...VT...PIIITA..IM.V.....F.E..
EFW62204/1-382	227	.IH...VISF...LF	GL.LAS.Y.SNN...YVH..RVAK...AK...IT...PIMIA..LL.S.....Y.E..
WP_000282635/1-349	182	.SAMYWWLL...PI	GRCMF.LEL...T.RD..RFFGK...SK.....I.....GF.IV.FSITAIMSAYQLLNQKPLLFKII...SI.....
Q54131/1-367	191	LNf...ICQV...LT	GMS.FYI.FGY.VI.RN..QIYNL...L.NF.....YVF.I.L.L.....TVIL...
WP_004194788/1-412	264	...GTIF...LI	GSSAAAY.SKS.L...PISDK...LGA.....FAV.VV.YL.....I.....
WP_001230914/1-332	180	WTW...FFYY...LL	GgyIAQF.TIE.EI.ES..RFKNW...M.KI.....VSI.LL.LL.....I...SPI...
WP_000170108/1-342	178	LVW...GICF...FL	GsvLSEI.HFD.KI...NL...K.KF.....LFF.FV.LF.....DFIYMFA
P37669/1-331	179	.DT...FYYI...LY	GMLGRAI.GMM.DT.QH..K...A...L.SW.....VSA.AL.FA.....T...GVF.I..
Q70J69/1-422	234	.MR...MAEF...VI	GISLAVL.VRR.GA.WR.....GPGV.....AAC.LV.LC.....AIGWGVN.L..

WP_000400612/1-640	241	..ID..EKM.....SFPGY.....IA..IIP...V.LGAS.LI.....IASN.GNDLVVSKLLSVRPV
WP_000639473/1-609	235	..IL..HSN...G.....YWPSY.....SA..LAP...V.LGAS.MV.....ILAN.KQ.NS..LFTSNRIA
SIU02679/1-640	241	..IN..EKM.....AFPGY.....IA..IIP...V.IGAS.LI.....IASN.GNDWIASKILSFKPI
AAx87447/1-622	250	..MN..NDI...A.....YIPGI.....TL..ILP...CIFTA.LI.....IHTT.SQNNIIKLCLSNKVI
CAC99369/1-622	257	..VSEYQPF.....LYRGG.....LL..FVA...I.LGVI.MI.....ATIS.HPASYSLSKIFSFKPL
WP_002245844/1-622	251	..ID..KHN...P.....FIPGM.....TL..LLP...CLLTA.LL.....IRSM.QYGTLPTRILSASPI
WP_011101182/1-660	272	..MSGQSDF.....TYRGG.....ML..LFT...V.LSTV.LV.....ATVA.HPASHLNRVLTNPLF
YP_004888877/1-615	262	..MKFDALQ.....TYQGG.....LL..LAT...V.LAGI.MI.....YGAR.LLHDHTPNLKEPRWM
WP_000379821/1-603	261	..VGDQDQW.....IYNGG.....FY..IIS...F.ATLF.II.....AIAV.HPSSLFAKFLSMKPL
WP_021723064/1-605	250	..MPAQGTF.....TYYGG.....MW..LAS...L.ASVI.MV.....ALVA.HPSLPTNKLFSNPVF
WP_001220853/1-605	255	..VKFTYLF.....AYLIG.....FL..LAS...L.AALA.MI.....LAAR.VLHEKTHHIQESKII
WP_003687310/1-624	243	..YS..EQT...A.....YFPGP.....AA..LIP...CLAVA.AL.....IYFN.HYEHPLKKFFQWKIT
YP_031545/1-343	226	.TYF..YTV...KA.NG...QLEQFW..YGYFAPG.....VV..LMA.....IGLFIFFKYAFQKS..ERELPLLF
WP_010975904/1-335	225	..LPFDELT.....TGP.....LA..VLL...V.IG.....VLS.LEANGC..VRALSPL
WP_011037591/1-364	244	WL...AGVN...G.....RIDVNM..LEFGRQH.....AVFLLSA...V.AGSL.MV.....I...CA.AR..LVQEWTL
AAA86375/1-379	235	WGGV.AAMN...G.....QVDVNN..LQFGKSS.....LLFLIAS...L.LGTA.MT.....L...CI.AY..FMQGWRWL
AAA75102/1-357	238	..LK..HSL...M.....NMYDL.....QL..VIPG...CIFLY.SL.....LLLL.STT.KLTKK.IELIS
P08888/1-367	260	..TS.AAFI.....SI..N.....NA...AP...V.DAFR.IA.....VLAG.LVL.SAAHSLPRPNL
Q52778/1-373	226	.FIC..FLG...WG.K...E.TYA..Y...NNLVLIHDEQSAKQVF..LMFSGSLAASAV.AMQSMFQCWRL.....VYS..TRVARFVA
P23214/1-333	235	.....A.....SYGKG.....ID.YTMT...C.YILV.SF.....STIA.ICT.S...VGD.PLV
WP_009895914/1-394	262	..RL..ASI...P.....FHTGL.....IA..LVS...CIMVW.....IASY.GKSYTMPDGAVKRVL
WP_004545264/1-394	262	..YL..ARI...P.....FHTGL.....IA..LMS...CVMVW.....IASY.GRGYTMRDGAVKRVL
NP_706267/1-390	269	..MTY.FKT.....TYAPL.....PL..IL...CGIT.FI.....IIAS.GC..DLYGILRLNIT
EFW62204/1-382	266	..MIY.FPT.....TYAPL.....PL..II...CGVC.FI.....LIAS.GC..DFYGILRLNLT
WP_000282635/1-349	241	..FN.....A.....DIISS..SYIQAI.....NT.IITT...VGLIIFN.....I...FI.AK..ICGNDFI
Q54131/1-367	231	..Y..VSK...SYGFSTQTIM...S...WSYYPDG.....LI..MSV...I.NALI.GI.....YAVFFISLLI.TR..GMKEIKLL
WP_004194788/1-412	297	.....S.....LFGKG.....YL..LLG...Y.PAM...V.....YAIL.WLACRL..PRWARRI
WP_001230914/1-332	222	.....ILFFIAKTIYHNLF.....AEYFYDT.....LF..VK...V.STLG.IF.....LTILML..T..LN..ESR.RESI
WP_000170108/1-342	218	WFLF..YEV...GS.K...K.DY..VSYINPG.....LW..GIA...F.IVCV.LV.....AFAIFPK.ME.KN..FPKTFLYF
P37669/1-331	218	..IS..RGTLYELQW.R.....G.NFADTWYLYCGP.....MV..FIC...A.IA.L.LT.....LV...KNTL..DTRTIRGL
Q70J69/1-422	275	..HL.DSYL.....PLAAG.....ML..IP...F..ALL.IP.....ALST.ADVNSAWSPLRWKPL

WP_000400612/1-640	282	VFFGLI	SYP	LYLWHH	PIYSF	YRSIFAG	S.P	DY.H	EL	T	LL	LL	LSFFLAIL
WP_000639473/1-609	274	QWVGKI	SYS	VYLWHH	PVIVA	MKHYDIEF	S.A	IN.I	FF	G		VI	VSFALGDI
SIU02679/1-640	282	VFIGLI	SYP	LYLWHH	PVYSF	YRSIFSG	S.P	ST.N	EL	L	IL	MA	LALVLAIL
AAx87447/1-622	292	VFIGKI	SYS	LYLYHW	IFIAF	AYYITGE	KQI	NN.Q	SI	A	IV	II	LTIIFSVL
CAC99369/1-622	300	RWIGTR	SYGI	YLWHY	PIITL	TTPVLEI	TQP	NI.W	RA	I	LQ	VA	ATFIIAEL
WP_002245844/1-622	293	VFVGKI	SYS	LYLYHW	IFIAF	AHYITGD	KQL	GL.P	AV	S	AV	AA	LTAGFSL
WP_011101182/1-660	315	KYVQQR	SYGI	YLYQF	PVMIF	YETKVKNI	GDH	LL.L	NS	L	IE	VA	LILIVTEL
YP_004888877/1-615	305	TFLADV	SYS	VLYLHW	PLYVI	FSHMMV	N.W	L	AA	L	LT	TV	LSIILSAL
WP_000379821/1-603	304	LIIGKR	SYS	LYLWHY	PIIVF	VNSYYVQ	GQI	PV.Y	VY	I	IE	IL	LTALMAEI
WP_021723064/1-605	293	EYIGSR	SYGI	YLWQL	PVFAF	AEAKVL	APT	AW.Y	NL	I	WQ	LA	LILILTEL
WP_001220853/1-605	298	SFLADT	SYAV	YLFHW	PFYII	FSQLTS	N.L	L	AV	L	LT	LI	CSYGFASL
WP_003687310/1-624	285	VAAGLI	SYS	LYLWHH	PILAF	MRYIG.PD	N.L	PP.Y	SP	A	AA	IV	LTAFSLI
YP_031545/1-343	276	RFINQA	SLGI	YILHF	FLLNN	LLYMVFPK.V	NNH	VH.A	IL	A	IP	IN	VT
WP_010975904/1-335	259	GLLGDA	SYS	YLWHT	FAISV	VAKAGLAI	GLG	AP.A	TM	F	AA	VL	SGTLIGIA
WP_011037591/1-364	291	QWIGRN	TLTI	LCTHM	LVFFV	LSGVAALA	GGF	GG.A	RP	G	L	GW	AIFVTLFALVASVP
AAA86375/1-379	284	RWIGANT	LLI	LGHT	LVFLV	VTSVVVRT	GVI	DR.K	LI	G	TP	VW	ALALCAFAIAACIP
AAA75102/1-357	279	AFLAFI	SYTI	YLSHE	PIRRV	VSTFIEPT	N.L	KR.G	FL	I	CG	VC	ACATI
P08888/1-367	298	LRRQDL	SYGI	YLYHM	LVMHT	LIAIGW.V	G	HW.W	LW	I	VE	PV	GTVALAAL
Q52778/1-373	290	VQLGQS	TLLE	YLVQG	AVFRL	MDLIQFGE.V	WNL	TTRI	TF	A	TV	LG	VA
P23214/1-333	268	KGRFDY	SYGV	YIYAF	PVQQV	VINT.L	HMG	FY.P	SM	L	LS	AV	TVLFLSHL
WP_009895914/1-394	302	VYFGSR	SYAI	YLIHV	PVYRL	TREIWERVATTPSAIDGSF	TL.R	FA	F	TA	IP	IV	LLLAE
WP_004545264/1-394	302	VYFGSR	SYAI	YLIHV	PVYRL	TREIWERIVITPSTIGGSF	TL.H	FA	F	TA	IP	IV	LVLAEL
NP_706267/1-390	307	RKLGET	TYS	VYLLHG	IFLYCLMTWIIPN	N.Y	TE.N	TF	IILVSTT	AF	LITFTSCL		
EFW62204/1-382	304	RKLGET	TYS	YLLHG	VFLYCVMTWVIPS	N.Y	SN.Y	FF	IMLISIT	AF	CVTLLSCI		
WP_000282635/1-349	281	VRAGRNT	LNIC	GMHEYITKLFIPMA	LAIIGFSV	TIP	NP	IC	A	II	YTCICVYVSDK		
Q54131/1-367	285	KMIGQN	SRAI	MAYHL	LVYVI	LDIIAS	IL	GD.Y	SLSGTDVYDNHFI	TK	WSVPVY	I	ALGLLLP
WP_004194788/1-412	330	GSRNDY	SYGI	YVFGF	LVQQV	LAYVGAY	KYG	FV.F	YL	A	AS	VF	FTFICAWF
WP_001230914/1-332	270	VSLSNQ	TMGV	FIIHT	YIMKV	WEKVLG.F	NFV	GA.Y	LL	F	AL	FTLSVFSI	
WP_000170108/1-342	269	TKYGKD	SLGI	YILHA	PICSM	IRILMLKV	G.I	NS.V	FL	H	VV	VG	IV
P37669/1-331	268	GLISRHS	SLGI	YGFHA	LIIHA	LRTRGIE	L.K	NW.P	IL	D	II	W	IF
Q70J69/1-422	315	VWFGEI	SLSE	YVSHL	LVQEE	LFSRLWNL	GMRAGLLPAPLPVLSW	WVAVL	SF	L	AQ	FA	LAVLAAWL

*

WP_000400612/1-640	329	....TYYLI	....EKPLRNSRS.....KY.ITAILLTL.S.VFG.TGLI.....GAFIFHI.NGVKDR..EINKS.AGEYA....
WP_000639473/1-609	320	....SYRTI	....ENTLRKRVK.....LQF.NIVLFS.....ST.LALC.....LFVMFT..KGV.S.....FRF.S...D....
SIU02679/1-640	329	....TYFLI	....EKPLRHSRK.....KS.ITTIILAVV.VFG.SGIF.....GIVTYSM.NGIKER..SVNKS.AGEYA....
AAx87447/1-622	340	....SYYLI	....EQPIRKSKL.....NF.KQSFLYIYF.IPS.LLLL.....GFNLYK..RQT.....
CAC99369/1-622	348	....SFRFI	....ETPIRKNGFINYFKGFKDKNYFIWKNKPVGKW.L.SIAGVVA.VLAIFTL.GMSNVLSVNT.NAEKQQ.TSVKTTTSTPDEK...
WP_002245844/1-622	341	....SYYLI	....EQPLRKRKM.....TF.KKAFFCLYL.APS.LILV.....GYNLYA..RGI.....
WP_011101182/1-660	364	....SYRFI	....ENPMRHYDYSRLLVDFKD.....FLRK..PKF.NRVTTAIVAL.TTVLFI..TAVGFVQQPS.KAEANKKTELQKT.IAANSKAAD
YP_004888877/1-615	349	....SYYVL	....EPVIAGKRA.....HVFHTVTRQL.QLP.VI..TAGVLLAVNTGVVKNAPQLSTLEQN.L.....
WP_000379821/1-603	352	....SYRFI	....ETPIRKKGFKAFAFL.....PKKK..GQF.ARTVLVILLVPSIVVLS..GQFDALGKQH.EAEKKEKKT.EFKTKKKVV...
WP_021723064/1-605	340	....SYRLI	....ELPTQRFDYSNILGILQN..F.VREKG..WKL.KKNILPMLIS.GLALISL.....GFIIISP.PSPHDQ.RVIEEK.IMAQQV...
WP_001220853/1-605	342	....SFYVL	....EPWIAGKNT.....PIV.QTLRPLPY.IHA.ILAAGTGILTIIIVCTV.TLLAPQVGAFETD.L.....
WP_003687310/1-624	332	....SYHCI	....EKPFKKWKG.....SF.AQSVLWIYA.LPM.LVLG.....AGSFFA..MR.....
YP_031545/1-343	328	I...TLVLQ	....RIPVVKK.....
WP_010975904/1-335	308	....AYMML	....ERPLRRRGRAR.....
WP_011037591/1-364	345	L...RWFLM	....RFA.....
AAA86375/1-379	339	M...RAVLV	....RRALDVGIE.....
AAA75102/1-357	325	....IAYLI	....ENKHLVVR.....
P08888/1-367	344	....SWALI	....EQPAMKLRT.....SL.VA.....
Q52778/1-373	342	I...RSIAR	....NLGYVSR.....
P23214/1-333	314	....SWNLV	....EKRFLTRS.....
WP_009895914/1-394	359	....NYRFV	....ETPLRLHGT.....RV.A.....
WP_004545264/1-394	359	....NYRFV	....EAPLRVYGA.....RL.A.....
NP_706267/1-390	359	....TFKLI	....ETPFIKLTK.....QTT.T..L.....
EFW62204/1-382	356	....TFKLI	....ELPFINITK.....QTA.M..K.....
WP_000282635/1-349	334	IGHWLSRTV	....GGPFLIK.....
Q54131/1-367	345	L...IFSIL	....KQKVIK.....
WP_004194788/1-412	378	....SWHLI	....EKRALALKD.....
WP_001230914/1-332	316	I...VGMLM	....KIPYFNR.....
WP_000170108/1-342	319	A...TYILK	....KIPFLNI.....
P37669/1-331	316	....LLSML	....VQRI.....
Q70J69/1-422	379	....LHRLV	....EQPLVRRLRP.....KD.VP.....

WP_000400612/1-640	384	.....SVTDVYNYKYGELLRGGICHSVQ..L.....TA.AISNG.....CIKNGKHNIFIIG
WP_000639473/1-609	364	.....TLKQVVEYRMDNSPWRPDICFLNPDQD.....YS.AFSKC.....QDKMTEKSFVVWG
SIU02679/1-640	384	.....SVTNVYDYYKYGELLRGGICHSVL..L.....KD.AISNG.....CIKNSRNNIFIIG
AAx87447/1-622	381	.....IRAEKEHI.....EQ.SIPVS.....NENHYPAKVIILG
CAC99369/1-622	429	.....KDDKKEDKATKD.....KEADSNKAS.EQK.....ETQKPDNKNKSAATPKTIITQTVaIG
WP_002245844/1-622	382	.....LKQEHLP.....LP.GAPLA.....AENHFPETVLTIG
WP_011101182/1-660	443	KKNAAALKRQKAAQAAAASSKKVATEKMqTKQAEAKLNSKQKQVEKEY.....D.LKP.....QVVLAMANTDLTAIG
YP_004888877/1-615	407	.....WVSGIYQDIDKIGTHEAV..LAAVTPKKKQ.ATPK.....GDQEKAPGVSIIIG
WP_000379821/1-603	426	.....KKDKQEDKQTAN.....SK.....EDIKSSPLLIG
WP_021723064/1-605	414	.....ALQKKQLA.....EANNKVPMSLKAVAKEY.....K.VQP.....VVAEKASQMNVLALG
WP_001220853/1-605	400	.....TVNGLKQAATNIGQTKVMA.....ERAD.ANS.....LGIADGTMLIG
WP_003687310/1-624	372	.....LPFMAQYDRGLGLTRSNTSCHNNT..G.....KQ.CLW.....GDTEKQPELLVLG
YP_031545/1-343		.....
WP_010975904/1-335		.....
WP_011037591/1-364		.....
AAA86375/1-379		.....
AAA75102/1-357		.....
P08888/1-367		.....
Q52778/1-373		.....
P23214/1-333		.....
WP_009895914/1-394		.....
WP_004545264/1-394		.....
NP_706267/1-390		.....
EFW62204/1-382		.....
WP_000282635/1-349		.....
Q54131/1-367		.....
WP_004194788/1-412		.....
WP_001230914/1-332		.....
WP_000170108/1-342		.....
P37669/1-331		.....
Q70J69/1-422		.....

WP_000400612/1-640	429	DSYAAALFNGLSHYIDNKGSDYIIS.QMTD.GNAPPLFVD...GKDDLQRSVITLNNNRINEIKRVQPEVLLT..WSVRGTNGVH..D.KKLAIDALS
WP_000639473/1-609	411	DSHAAHLMPGLKSVFGNSL...NIT.QRTA.SLCPPIIGL...QKDDRP.YCKDINDMVAKEISDNKPTTVLMSALWPV...YP.....MRDYLPE
SIU02679/1-640	429	DSYAAALYNGLSYIKNNNEKYVIS.QMTD.GNAPPLFVS...GKDDLQRDVGSINADRIKEIGIVKPEIVLLT..WSVRGNSGVH..D.KKLAIEALS
AAX87447/1-622	409	DSHSSHLEAFLNYV.GNKE.GWKAD.IFKDKFECSFIVNE...QYQLDP.NCQSVWQKDSQY.KAIFISAFYDL.RMGG...QPVPRFR.PETFIEP..D
CAC99369/1-622	479	DSVMLDIEPYLKEAVPNITIDGLVGRQLRD...AITTATG...YKK.....FNSSENSSVILE..L...GTNGPF..T.E.....DQ
WP_002245844/1-622	410	DSHAGHLRGFLDYV.GSRE.GWKAK.ILSLDSECLVWVDE...KLADNP.LCRKYRDEVEKA.EAVFIAQFYDL.RMGG...QPVPRFE.AQSFLIP..G
WP_011101182/1-660	510	DSVLLDVSSDLQDVIPGTVVQGRVGRQVTE...VPGIINS...LKS.....QGQLAHNVLLN..I...GTNGTI..T.D.....DQ
YP_004888877/1-615	453	DSVTLGTRSYPGHDVANSNIDAEGDRTMNL...AYKVMMN...QQR.....SHTLRQYVVIC..I...GTNALD..DYE.....EQ
WP_000379821/1-603	452	DSVMVDIGNVFTKKIPNAQIDGKVGRLVD...ATPIVKS...QYKD.....YAKKGQKVVVE..L...GTNGAF..T.K.....DQ
WP_021723064/1-605	458	DSVMVAASTNLQEVFPHMYIDAAVGRQAES...LDTDLTN...AKS.....KMPNPDAYLIG..L...GTNGTI..K.E.....GE
WP_001220853/1-605	437	DSVALRANTALQTALPGAQINAQVSVTTKT...ANEIMLN...NSQ.....NKFLPKTVVIA..T...GVNPE..NYK.....DD
WP_003687310/1-624	414	DSHADHYKTFFDAV.GKKE.KWSAT.MVSA.DACAYVEGYASRVFQNWA.ACRAVYRYAEEH.LPRYPKVVLAM.RWGS...QMPE.NS.RSLAYDA..G
YP_031545/1-343	341	.....L.....
WP_010975904/1-335	324	.....RVTAGLAGR.....
WP_011037591/1-364		.....
AAA86375/1-379		.....
AAA75102/1-357		.....
P08888/1-367		.....
Q52778/1-373	355	.....I.....
P23214/1-333	327	.....SPK.....
WP_009895914/1-394		.....
WP_004545264/1-394		.....
NP_706267/1-390	378	.....VKELIP.....
EFW62204/1-382	375	.....IRGIK.....
WP_000282635/1-349		.....
Q54131/1-367	358	.....I.K.....
WP_004194788/1-412	392	.....WGPG.....
WP_001230914/1-332	329	.....I.....
WP_000170108/1-342	332	.....V.L.....
P37669/1-331		.....
Q70J69/1-422		.....

WP_000400612/1-640	599	NESGCLTRVGNPDPFI.TAVDWGHLTK.....PGSDFLFNKIGNKI.....IK.....
WP_000639473/1-609	568	TESYCKAIIGNRIAYP.IQYDNAHLTP.....EGSGWFIEEVKKQI.....S.....K...
SIU02679/1-640	599	NESGCLTRVGDGPDFV.TAVDWGHLTK.....PGSDFLMKKIGHLI.....IR.....
AAx87447/1-622	576	KDS....VMAEG..KY.LYGDQDHLTN.....FGAYYMAKEFSKYQRV...MTPEQV.KKLYE
CAC99369/1-622	592	GQ.....VEIYG..RY.LYGDQDHLTY.....FGSYMGREFHKKHERL...LKSSRD.GAL.Q
WP_002245844/1-622	577	KNT.....VEIYG..RY.LYGDQDHLTY.....FGSYMGREFHKKHERL...LKSSRD.GAL.Q
WP_011101182/1-660	626	NQ.....S..GW.FADDNVHPNT.....TGNRQLTNLIANRI.....AEVNN.....N..
YP_004888877/1-615	573	QH.....P..EVFKGTDGVHFGG....IRAGDILYAKVINQAL....TAAKQTPAKPA.
WP_000379821/1-603	567	GH.....P..EY.FAYDGIHLEY.....AGSKALTDLIVKTM....ETHATN..KK..
WP_021723064/1-605	572	GQ.....S..SW.FYSDNIHPKG.....TGAEKYAALVANSL....TDVE.....K..
WP_001220853/1-605	559	EH.....P..EIWAGTDQVHFGSESSTIEAGAKLYADTIATAL...QTAQDKPVKSK.
WP_003687310/1-624	583	AD....FQIG...GLP.VYSKDHINP.....YGGTELAKRFSEKQRF...LDTRHN.H....
YP_031545/1-343	343	.....P..
WP_010975904/1-335	333	.....A....A....E..
WP_011037591/1-364	354	.....PWT.....LGARPVS....A...
AAA86375/1-379	354	.....TQVRHFQN.....HQSMWRVRVSHRQRRSA.....Q...
AAA75102/1-357	347	.....KNTSN..KL..AY....ST..
P08888/1-367	363	.....RL....SVA.....
Q52778/1-373	369	.....QS.....V....I.....N...
P23214/1-333	330	.....LSLD.....
WP_009895914/1-394	379	.....SRSRNVE..S...RG.....SV...TSA.....Q
WP_004545264/1-394	379	.....AHARNVE..N...RK.....SI...ASV.....P
NP_706267/1-390	384	.....TLT....N.NN....Q..
EFW62204/1-382	381	.....N.....T..
WP_000282635/1-349	367	.....N...
Q54131/1-367	367	.....N...
WP_004194788/1-412	403	.....ARLTMKK.....EGV.....
WP_001230914/1-332	332	.....L...
WP_000170108/1-342	342	.....K...
P37669/1-331	325	.....DR.....NRL....VS.....
Q70J69/1-422	408	....APPA.....H..Q....AGAAH.....MV.....ER.....