

Proteomic landscape of seminal plasma associated with dairy bull fertility

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Supplementary table S1. Proteins of the bull seminal plasma as identified by DDA (data dependent acquisition) label-free mass spectrometry and tools of bioinformatics (Progenesis QI and UniProt database). The list of proteins includes those exclusively detected in high (HF) and low (LF) fertility bulls as well as those common (C) to both groups.

Accession number (Uniprot)	Description	Group	Coverage (%)	#Peptides	#Unique	PTM	Avg. Mass (mDa)
tr A7Z057 A7Z057_BOVIN	14-3-3 protein gamma	HF	17	4	1	Y	28303
P68252 1433G_BOVIN	14-3-3 protein gamma	HF	17	4	1	Y	28253
Q0VC36 1433S_BOVIN	14-3-3 protein sigma	HF	13	4	1	Y	27849
Q3SZI4 1433T_BOVIN	14-3-3 protein theta	HF	11	4	0	N	27764
tr B0JYM5 B0JYM5_BOVIN	14-3-3 protein theta	HF	11	4	0	N	27764
P63103 1433Z_BOVIN	14-3-3 protein zeta/delta	C	52	13	10	Y	27745
A8YXY3 SEP15_BOVIN	15 kDa selenoprotein	HF	32	3	3	Y	17975
tr F1MLV1 F1MLV1_BOVIN	26S protease regulatory subunit 10B	HF	4	1	1	N	44173
Q2KIW6 PRS10_BOVIN	26S protease regulatory subunit 10B	HF	4	1	1	N	44074
P56701 PSMD2_BOVIN	26S proteasome non-ATPase regulatory subunit 2	HF	2	1	1	Y	100258
Q3ZBZ1 CAB45_BOVIN	45 kDa calcium-binding protein	C	70	18	18	Y	41106
tr F1N2L9 F1N2L9_BOVIN	4-trimethylaminobutyraldehyde dehydrogenase	C	2	1	1	N	53991
Q2KJH9 AL9A1_BOVIN	4-trimethylaminobutyraldehyde dehydrogenase	C	2	1	1	N	53977
Q05927 5NTD_BOVIN	5'-nucleotidase	C	61	31	16	Y	62966
tr G3MZC1 G3MZC1_BOVIN	5'-nucleotidase (Fragment)	HF	54	18	3	Y	35982
Q75WB5 OPLA_BOVIN	5-oxoprolinase	LF	1	1	1	Y	137465
tr F1ME97 F1ME97_BOVIN	5-oxoprolinase	LF	1	1	1	Y	137354
	6-phosphogluconate dehydrogenase						
tr Q3ZCI4 Q3ZCI4_BOVIN	decarboxylating	HF	2	1	1	N	53077
tr F1MKH8 F1MKH8_BOVIN	72 kDa type IV collagenase	C	10	2	2	N	73848
Q0VCX2 GRP78_BOVIN	78 kDa glucose-regulated protein	C	20	11	9	N	72400
	Abnormal spindle-like microcephaly-associated						
tr F1MM80 F1MM80_BOVIN	protein homolog	C	0	1	1	Y	405871

P62285 ASPM_BOVIN	Abnormal spindle-like microcephaly-associated protein homolog (Fragment)	HF	0	1	1	Y	395924
tr A0JND7 A0JND7_BOVIN	ABO blood group (Transferase A alpha 1-3-N-acetylgalactosaminyltransferase	LF	9	2	2	N	41926
P23795 ACES_BOVIN	Acetylcholinesterase	C	2	3	0	N	67664
Q17QB3 ASAH1_BOVIN	Acid ceramidase	LF	21	6	6	N	44965
tr G3M8V1 G3M8V1_BOVIN	Acid phosphatase type 5	C	16	4	4	Y	38237
Q3ZC91 ASM3A_BOVIN	Acid sphingomyelinase-like phosphodiesterase 3a	C	7	2	2	N	51221
tr F1MUI5 F1MUI5_BOVIN	Acid sphingomyelinase-like phosphodiesterase 3a	C	7	2	2	N	51175
tr P79343 P79343_BOVIN	Acrosin	C	8	3	3	Y	41722
P01000 IAC1_BOVIN	Acrosin inhibitor 1	C	60	6	6	Y	7379
tr Q32KR2 Q32KR2_BOVIN	Acrosomal vesicle protein 1	LF	14	3	3	Y	28953
tr A4IFM8 A4IFM8_BOVIN	Actin alpha 1 skeletal muscle	HF	32	16	1	Y	42023
Q3ZC07 ACTC_BOVIN	Actin alpha cardiac muscle 1	C	32	17	0	Y	42019
P68138 ACTS_BOVIN	Actin alpha skeletal muscle	C	32	17	0	Y	42051
P60712 ACTB_BOVIN	Actin cytoplasmic 1	C	75	26	11	Y	41737
P63258 ACTG_BOVIN	Actin cytoplasmic 2	C	75	26	11	Y	41793
A6QQV9 AF1L1_BOVIN	Actin filament-associated protein 1-like 1	HF	2	2	2	Y	85931
E1BNG3 ASCC3_BOVIN	Activating signal cointegrator 1 complex subunit 3	HF	1	2	1	N	250763
tr Q3MHY9 Q3MHY9_BOVIN	ACTR1A protein (Fragment)	HF	16	4	4	N	41463
P07107 ACBP_BOVIN	Acyl-CoA-binding protein	C	61	6	6	Y	10044
tr Q2NKZ3 Q2NKZ3_BOVIN	ADAM metallopeptidase domain 32	C	7	4	4	Y	82546
P00570 KAD1_BOVIN	Adenylate kinase isoenzyme 1	C	74	13	13	Y	21664
O62827 ADML_BOVIN	ADM	C	49	13	13	Y	20963
tr B0JYQ0 B0JYQ0_BOVIN	ALB protein	LF	64	47	1	Y	69294
tr Q5E962 Q5E962_BOVIN	Aldo-keto reductase family 1 member B1	C	76	18	16	Y	36050
Q5EA79 GALM_BOVIN	Aldose 1-epimerase	HF	5	1	1	N	37614
P16116 ALDR_BOVIN	Aldose reductase	C	76	18	16	Y	35919
tr A4FUG6 A4FUG6_BOVIN	ALG2 protein	LF	2	1	1	Y	46831
P09487 PPBT_BOVIN	Alkaline phosphatase tissue-nonspecific isozyme	C	7	3	3	N	57193
tr Q28921 Q28921_BOVIN	Alpha 1-antichymotrypsin (Fragment)	HF	6	1	1	N	28571
tr Q5GN72 Q5GN72_BOVIN	Alpha-1-acid glycoprotein	C	7	1	1	N	23158
Q3SZR3 A1AG_BOVIN	Alpha-1-acid glycoprotein	C	7	1	1	N	23182

tr Q27983 Q27983_BOVIN	Alpha1-antichymotrypsin isoform pHHK11 (Fragment)	HF	7	1	1	N	22711
P34955 A1AT_BOVIN	Alpha-1-antiproteinase	C	4	1	1	N	46104
Q2KJF1 A1BG_BOVIN	Alpha-1B-glycoprotein	LF	10	3	3	Y	53554
P28800 A2AP_BOVIN	Alpha-2-antiplasmin	C	3	1	1	N	54711
P12763 FETUA_BOVIN	Alpha-2-HS-glycoprotein	LF	9	2	2	Y	38419
tr B0JYN6 B0JYN6_BOVIN	Alpha-2-HS-glycoprotein	LF	9	2	2	Y	38419
Q7SIH1 A2MG_BOVIN	Alpha-2-macroglobulin	C	18	20	19	Y	167575
Q3B7N2 ACTN1_BOVIN	Alpha-actinin-1	HF	4	3	2	Y	102980
Q9XSJ4 ENOA_BOVIN	Alpha-enolase	C	18	6	6	N	47326
tr F1MB08 F1MB08_BOVIN	Alpha-enolase	LF	12	3	3	N	47284
tr G5E5M8 G5E5M8_BOVIN	Alpha-mannosidase	C	11	10	4	Y	115130
tr E1BHP0 E1BHP0_BOVIN	Alpha-mannosidase	C	44	32	22	Y	115228
tr F1MWT0 F1MWT0_BOVIN	Alpha-mannosidase	C	42	27	6	Y	115861
tr A8YXY9 A8YXY9_BOVIN	Alpha-mannosidase	HF	48	21	1	Y	85396
Q58DH9 NAGAB_BOVIN	Alpha-N-acetylgalactosaminidase	LF	3	1	1	N	46533
tr Q1RMM9 Q1RMM9_BOVIN	Alpha-N-acetylgalactosaminidase	LF	3	1	1	N	46561
tr Q08E54 Q08E54_BOVIN	Amyloid beta (A4) protein	C	14	5	5	Y	78597
tr A6H6X2 A6H6X2_BOVIN	ANG2 protein	C	43	5	5	Y	17155
tr Q2NKV1 Q2NKV1_BOVIN	Angiogenin ribonuclease RNase A family 5	C	56	10	10	Y	17004
P10152 ANG1_BOVIN	Angiogenin-1	C	56	10	10	Y	16970
P80929 ANG2_BOVIN	Angiogenin-2	C	51	5	5	Y	14522
tr Q9BDG1 Q9BDG1_BOVIN	Angiotensin I converting enzyme (Fragment)	C	73	6	3	Y	14326
tr F1MQJ0 F1MQJ0_BOVIN	Angiotensin-converting enzyme (Fragment)	C	30	39	34	Y	141241
P15497 APOA1_BOVIN	Apolipoprotein A-I	C	32	7	7	Y	30276
tr V6F9A2 V6F9A2_BOVIN	Apolipoprotein A-I	C	32	7	7	Y	30276
P81644 APOA2_BOVIN	Apolipoprotein A-II	C	16	1	1	N	11202
Q08DD1 ARSA_BOVIN	Arylsulfatase A	C	16	3	3	N	53807
Q148F3 ARSK_BOVIN	Arylsulfatase K	C	10	3	3	N	61361
Q2HJH1 DNPEP_BOVIN	Aspartyl aminopeptidase	C	41	11	11	Y	51828
tr Q3MHZ3 Q3MHZ3_BOVIN	ATP6AP1 protein (Fragment)	C	22	6	6	Y	51519
tr A7E3T8 A7E3T8_BOVIN	ATP-binding cassette sub-family G member 2	HF	3	1	1	Y	73078
tr B2D1N9 B2D1N9_BOVIN	ATP-binding cassette sub-family G member 2	HF	3	1	1	Y	73097
Q32PF2 ACLY_BOVIN	ATP-citrate synthase	HF	1	1	1	N	119789

P17453 BPI_BOVIN	Bactericidal permeability-increasing protein	LF	2	1	1	N	53442
tr F1MQ17 F1MQ17_BOVIN	Bactericidal permeability-increasing protein (Fragment)	LF	2	1	1	N	49002
tr Q3ZBX0 Q3ZBX0_BOVIN	Basigin	LF	5	1	1	N	29773
Q5EA01 B4GA1_BOVIN	Beta-1 4-glucuronyltransferase 1	LF	18	3	3	N	47231
P01888 B2MG_BOVIN	Beta-2-microglobulin	C	58	8	8	Y	13677
tr A7LM96 A7LM96_BOVIN	Beta-defensin	C	15	1	1	Y	9310
tr G3N236 G3N236_BOVIN	Beta-defensin (Fragment)	C	16	1	1	Y	10056
tr G8CY17 G8CY17_BOVIN	Beta-defensin (Fragment)	C	21	4	4	Y	10785
tr G8CY19 G8CY19_BOVIN	Beta-defensin (Fragment)	C	31	3	3	Y	11397
tr G8CY20 G8CY20_BOVIN	Beta-defensin (Fragment)	C	10	2	2	Y	9237
tr F1MBP7 F1MBP7_BOVIN	Beta-defensin 10	C	40	3	3	Y	6954
P46168 DFB10_BOVIN	Beta-defensin 10	C	40	3	3	Y	6928
P46169 DFB11_BOVIN	Beta-defensin 11	HF	33	3	1	Y	6507
Q32P86 DB119_BOVIN	Beta-defensin 119	C	28	2	2	Y	9805
P46170 DFB12_BOVIN	Beta-defensin 12	HF	53	3	1	Y	4106
tr G8CY12 G8CY12_BOVIN	Beta-defensin 126 (Fragment)	C	27	3	3	Y	9374
tr G8CY08 G8CY08_BOVIN	Beta-defensin 126 (Fragment)	C	7	1	1	N	11183
tr G8CY14 G8CY14_BOVIN	Beta-defensin 129 (Fragment)	C	31	7	6	Y	17856
P46171 DFB13_BOVIN	Beta-defensin 13	HF	48	3	1	Y	4450
tr G8CY09 G8CY09_BOVIN	Beta-defensin 132	HF	8	1	1	Y	9337
tr Q5W5H4 Q5W5H4_BOVIN	Beta-defensin 405 (Fragment)	C	60	3	3	Y	4775
O18815 DFBC7_BOVIN	Beta-defensin C7 (Fragment)	C	38	4	2	Y	5650
tr A5D7U5 A5D7U5_BOVIN	Beta-galactosidase	C	40	18	18	Y	73475
tr F1MUF4 F1MUF4_BOVIN	Beta-galactosidase	C	40	18	18	Y	73475
tr F1MDX6 F1MDX6_BOVIN	Beta-galactosidase (Fragment)	C	7	2	1	N	75483
tr O18974 O18974_BOVIN	Beta-galactoside alpha-2 6-sialyltransferase	C	38	14	14	Y	46246
tr A3KMY8 A3KMY8_BOVIN	Beta-glucuronidase	C	38	19	17	Y	74470
tr H7BWW2 H7BWW2_BOVIN	Beta-hexosaminidase	C	54	28	19	Y	61262
tr E1B9E8 E1B9E8_BOVIN	Beta-hexosaminidase	C	33	19	10	Y	62467
Q0V8R6 HEXA_BOVIN	Beta-hexosaminidase subunit alpha	C	6	2	2	N	60353
Q5I597 BHMT1_BOVIN	Betaine--homocysteine S-methyltransferase 1	HF	2	1	1	N	44878
Q29444 MANBA_BOVIN	Beta-mannosidase	C	59	38	36	Y	101176
tr A6QLB0 A6QLB0_BOVIN	Beta-mannosidase	C	59	38	36	Y	101124

P13600 NGF_BOVIN	Beta-nerve growth factor	C	48	18	18	Y	26669
tr F1MJM4 F1MJM4_BOVIN	Biotinidase	LF	5	3	3	N	58310
A6QQ07 BTD_BOVIN	Biotinidase	LF	5	3	3	N	58353
tr A5D7K0 A5D7K0_BOVIN	BLVRA protein	LF	2	1	1	N	33644
Q2KJH1 BMP4_BOVIN	Bone morphogenetic protein 4	C	13	3	3	Y	46626
tr E5DCU8 E5DCU8_BOVIN	Bone morphogenetic protein 4 (Fragment)	C	14	3	3	Y	42751
tr Q5I4I9 Q5I4I9_BOVIN	Bone morphogenetic protein 4 (Fragment)	C	14	3	3	Y	44544
Q8SPU5 BPIA1_BOVIN	BPI fold-containing family A member 1	C	11	2	2	N	26576
Q8SPF8 BPIB1_BOVIN	BPI fold-containing family B member 1	C	52	19	19	Y	51700
tr F1MLW2 F1MLW2_BOVIN	BPI fold-containing family B member 1	C	52	19	19	Y	51716
P80724 BASP1_BOVIN	Brain acid soluble protein 1	C	57	7	7	N	23011
P39873 RNBR_BOVIN	Brain ribonuclease	C	45	14	4	Y	18450
Q95106 BDNF_BOVIN	Brain-derived neurotrophic factor	HF	3	1	1	N	28174
tr F1N7Q0 F1N7Q0_BOVIN	BTB (POZ) domain containing 12	HF	1	2	0	N	197631
tr O46625 O46625_BOVIN	BTrappin-2 protein (Fragment)	C	51	6	4	Y	14324
tr A6H758 A6H758_BOVIN	C11H9ORF9 protein	C	6	1	1	N	25006
Q3SX46 C1GLC_BOVIN	C1GALT1-specific chaperone 1	C	19	4	4	Y	36441
tr A5PJL8 A5PJL8_BOVIN	C1QTNF5 protein	C	56	11	10	Y	25349
Q6R8F2 CADH1_BOVIN	Cadherin-1	C	6	6	6	Y	97938
tr F1N619 F1N619_BOVIN	Cadherin-1 (Fragment)	C	6	6	6	Y	91860
tr F1MGE7 F1MGE7_BOVIN	Calcium-transporting ATPase	LF	1	1	1	N	109266
tr E1BMQ6 E1BMQ6_BOVIN	Calcium-transporting ATPase	C	1	1	1	N	109321
P62157 CALM_BOVIN	Calmodulin	C	36	2	2	N	16838
tr F1MLH6 F1MLH6_BOVIN	Calmodulin	C	36	2	2	N	16847
tr A5D7J6 A5D7J6_BOVIN	CALR protein	HF	30	6	6	Y	48098
P52193 CALR_BOVIN	Calreticulin	HF	30	6	6	Y	48039
P06833 PYY2_BOVIN	Caltrin	C	38	9	7	Y	8976
P00517 KAPCA_BOVIN	cAMP-dependent protein kinase catalytic subunit alpha	C	27	5	5	N	40620
P00514 KAP0_BOVIN	cAMP-dependent protein kinase type I-alpha regulatory subunit	C	18	5	4	Y	42893
P00515 KAP2_BOVIN	cAMP-dependent protein kinase type II-alpha regulatory subunit	HF	18	7	6	N	45094
P00921 CAH2_BOVIN	Carbonic anhydrase 2	HF	18	2	2	N	29114

tr F1N0H3 F1N0H3_BOVIN	Carbonic anhydrase 2 (Fragment)	HF	19	2	2	N	27750
tr E1BN79 E1BN79_BOVIN	Carboxylic ester hydrolase	C	53	29	26	Y	64339
tr F1MIM4 F1MIM4_BOVIN	Carboxylic ester hydrolase	HF	2	3	0	N	67021
tr A6BML7 A6BML7_BOVIN	Carboxypeptidase	C	31	14	14	Y	53981
Q17QK3 CBPQ_BOVIN	Carboxypeptidase Q	C	6	2	2	N	51679
tr Q6VAN8 Q6VAN8_BOVIN	Carcinoembryonic antigen-related cell adhesion molecule 1	C	6	2	2	Y	47944
tr Q6VAN7 Q6VAN7_BOVIN	Carcinoembryonic antigen-related cell adhesion molecule 1 isoform 3Ls	C	6	2	2	Y	47167
tr Q6VAN6 Q6VAN6_BOVIN	Carcinoembryonic antigen-related cell adhesion molecule 1 isoform 3S	C	6	2	2	Y	40857
tr Q6VAN5 Q6VAN5_BOVIN	Carcinoembryonic antigen-related cell adhesion molecule 1 isoform 3Ss	C	7	2	2	Y	40080
tr J9U8U3 J9U8U3_BOVIN	Cardiomyopathy associated protein 3 (Fragment)	HF	1	2	2	Y	377297
P07688 CATB_BOVIN	Cathepsin B	C	53	15	15	Y	36661
tr F1MMR6 F1MMR6_BOVIN	Cathepsin D	C	49	19	19	Y	44705
tr Q0VCU3 Q0VCU3_BOVIN	Cathepsin F	LF	21	7	7	Y	50893
P25975 CATL1_BOVIN	Cathepsin L1	C	61	18	18	Y	37347
tr B0JYN1 B0JYN1_BOVIN	Cathepsin L2	C	61	18	18	Y	37347
Q5E998 CATL2_BOVIN	Cathepsin L2	C	61	18	18	Y	37393
P25326 CATS_BOVIN	Cathepsin S	C	49	10	9	Y	37176
tr A5PJF7 A5PJF7_BOVIN	C-C motif chemokine	LF	39	11	10	Y	11100
P28291 CCL2_BOVIN	C-C motif chemokine 2	C	55	16	16	Y	11114
tr F1MQT9 F1MQT9_BOVIN	CD44 antigen (Fragment)	HF	3	2	2	N	84147
tr Q32PA1 Q32PA1_BOVIN	CD59 molecule complement regulatory protein	C	9	1	1	Y	13663
P30932 CD9_BOVIN	CD9 antigen	C	20	3	3	Y	25258
tr A6QLC4 A6QLC4_BOVIN	CDH1 protein	C	6	6	6	Y	97975
tr A6QP71 A6QP71_BOVIN	CDH15 protein	HF	1	1	0	N	77042
tr Q0VCE8 Q0VCE8_BOVIN	CEACAM8 protein	C	7	2	2	Y	40110
tr Q148D9 Q148D9_BOVIN	Cellular repressor of E1A-stimulated genes 1	C	55	7	7	Y	23948
tr Q66LI3 Q66LI3_BOVIN	CENP-C (Fragment)	HF	3	1	1	Y	37560
tr E1BJ15 E1BJ15_BOVIN	Centrosomal protein of 290 kDa	C	1	2	1	Y	290363
Q9TU23 CE290_BOVIN	Centrosomal protein of 290 kDa (Fragment)	C	1	2	1	Y	171786
Q1ZYR0 CLN5_BOVIN	Ceroid-lipofuscinosis neuronal protein 5	C	19	5	5	Y	41227

Q9XSA7 CLIC4_BOVIN	Chloride intracellular channel protein 4	LF	7	1	1	Y	28727
tr Q32LC5 Q32LC5_BOVIN	CKLF-like MARVEL transmembrane domain containing 2	C	20	2	2	N	25830
P49951 CLH1_BOVIN	Clathrin heavy chain 1	HF	3	3	3	N	191587
tr F1MPU0 F1MPU0_BOVIN	Clathrin heavy chain 1 (Fragment)	HF	3	3	3	N	189936
P17697 CLUS_BOVIN	Clusterin	C	63	62	59	Y	51114
Q28107 FA5_BOVIN	Coagulation factor V	C	1	3	0	Y	248981
tr F1MTT3 F1MTT3_BOVIN	Coagulation factor XII	LF	3	1	1	N	67235
Q3SYW2 CO2_BOVIN	Complement C2	C	11	6	6	Y	82906
tr Q0V7N2 Q0V7N2_BOVIN	Complement C2	C	11	6	6	Y	86999
tr A0A0A0MP91 A0A0A0MP91_BOVIN	Complement C2	C	11	6	6	Y	82907
Q2UVX4 CO3_BOVIN	Complement C3	C	35	45	44	Y	187252
P81187 CFAB_BOVIN	Complement factor B	C	35	17	17	Y	85366
Q28085 CFAH_BOVIN	Complement factor H	C	74	80	33	Y	140374
tr F1MC45 F1MC45_BOVIN	Complement factor H (Fragment)	C	63	47	4	Y	96593
tr A0A075TEJ1 A0A075TEJ1_BOVIN	Complement regulatory protein variant	LF	13	3	3	Y	46808
tr F1MH70 F1MH70_BOVIN	Condensin complex subunit 2	HF	6	1	1	Y	80694
tr F1MVI0 F1MVI0_BOVIN	Contactin-1	C	7	4	4	Y	113306
Q28106 CNTN1_BOVIN	Contactin-1	HF	7	4	4	Y	113385
Q5EA61 KCRB_BOVIN	Creatine kinase B-type	C	4	1	1	N	42719
tr A4IFS7 A4IFS7_BOVIN	CTSL1 protein	LF	8	3	1	Y	37150
P55206 ANFC_BOVIN	C-type natriuretic peptide	C	56	26	24	Y	13291
A7MBJ5 CAND1_BOVIN	Cullin-associated NEDD8-dissociated protein 1	C	30	21	19	Y	136375
tr Q1RMP3 Q1RMP3_BOVIN	CutA divalent cation tolerance homolog (E. coli)	LF	48	5	5	Y	16347
tr Q5DPW9 Q5DPW9_BOVIN	Cystatin E/M	C	69	13	12	Y	16356
P01035 CYTC_BOVIN	Cystatin-C	C	50	7	7	Y	16265
tr Q32LP8 Q32LP8_BOVIN	Cysteine-rich secretory protein 2	HF	11	2	2	Y	27143
tr Q3ZCL0 Q3ZCL0_BOVIN	Cysteine-rich secretory protein 2	C	28	4	4	Y	27453
Q0IIF9 CP2U1_BOVIN	Cytochrome P450 2U1	HF	3	2	2	Y	61997
tr F1MFI9 F1MFI9_BOVIN	Cytochrome P450 2U1	HF	3	2	2	Y	62031
Q3ZC84 CNBP2_BOVIN	Cytosolic non-specific dipeptidase	HF	4	1	1	N	52655
tr A5D986 A5D986_BOVIN	Cytosolic sialic acid 9-O-acetylerase homolog	C	14	5	5	N	59703
tr A6QQL7 A6QQL7_BOVIN	DCN1-like protein	HF	5	1	1	Y	28293
tr F1MDM6 F1MDM6_BOVIN	DCN1-like protein	HF	5	1	1	Y	28278

tr A6QPL7 A6QPL7_BOVIN	DDN protein	HF	2	2	1	N	66094
Q58CX7 DIA1R_BOVIN	Deleted in autism-related protein 1 homolog	LF	2	1	1	N	48095
P56541 DNS2A_BOVIN	Deoxyribonuclease-2-alpha	LF	8	2	2	Y	40282
tr F1MZ33 F1MZ33_BOVIN	Deoxyribonuclease-2-alpha	LF	8	2	2	Y	40266
tr F1MZF2 F1MZF2_BOVIN	Desmocollin-2	C	7	3	3	N	100553
P33545 DSC2_BOVIN	Desmocollin-2 (Fragment)	LF	7	2	2	N	95875
tr A0JN77 A0JN77_BOVIN	Dihydroxyacetone kinase 2 homolog (S. cerevisiae)	C	25	9	9	N	59160
tr F1N455 F1N455_BOVIN	Dipeptidyl peptidase 1	LF	5	1	1	N	51979
P81425 DPP4_BOVIN	Dipeptidyl peptidase 4	C	36	24	12	Y	88370
Q10741 ADA10_BOVIN	Disintegrin and metalloproteinase domain-containing protein 10	C	6	3	3	Y	84188
O77780 ADAM2_BOVIN	Disintegrin and metalloproteinase domain-containing protein 2	C	17	7	7	Y	83151
A3KMX0 ER6L2_BOVIN	DNA excision repair protein ERCC-6-like 2	HF	3	2	2	Y	176298
Q2NL21 DJC11_BOVIN	DnaJ homolog subfamily C member 11	HF	1	1	1	N	63237
tr F1N036 F1N036_BOVIN	DnaJ homolog subfamily C member 3	C	12	2	2	N	57731
tr V6F7Z2 V6F7Z2_BOVIN	Down syndrome cell adhesion molecule like 1	C	1	2	1	N	230459
tr A6QNX2 A6QNX2_BOVIN	DPP7 protein	C	43	15	12	Y	53642
tr Q5H9M6 Q5H9M6_BOVIN	Dynein heavy chain (Fragment)	HF	0	1	1	Y	501567
P61285 DYL1_BOVIN	Dynein light chain 1 cytoplasmic	HF	12	1	1	Y	10366
Q3MHR3 DYL2_BOVIN	Dynein light chain 2 cytoplasmic	HF	12	1	1	Y	10350
A6QQP7 DYSF_BOVIN	Dysferlin	HF	0	2	1	Y	239311
tr F1N7D7 F1N7D7_BOVIN	Dystroglycan	C	19	11	9	Y	97309
A5D7F8 SH3R1_BOVIN	E3 ubiquitin-protein ligase SH3RF1	LF	1	1	1	Y	87592
A1A4K5 ENPP2_BOVIN	Ectonucleotide pyrophosphatase/phosphodiesterase family member 2	C	7	3	3	Y	101717
P15396 ENPP3_BOVIN	Ectonucleotide pyrophosphatase/phosphodiesterase family member 3	C	35	21	20	Y	99523
tr G8JKZ1 G8JKZ1_BOVIN	Ectonucleotide pyrophosphatase/phosphodiesterase family member 3	C	35	21	20	Y	99495

Q5E9R3 EHD1_BOVIN	EH domain-containing protein 1	C	34	12	8	Y	60682
tr A7YY77 A7YY77_BOVIN	ENDOD1 protein	HF	3	2	1	N	54868
tr Q3SZQ8 Q3SZQ8_BOVIN	Endopin 2	LF	7	3	2	N	47034
tr Q5J801 Q5J801_BOVIN	Endopin 2B	LF	7	3	2	N	47002
Q95M18 ENPL_BOVIN	Endoplasmin	C	13	8	8	Y	92427
O02775 EAP_BOVIN	Enteric beta-defensin	C	28	2	2	Y	7127
Q3ZC64 EFNA1_BOVIN	Ephrin-A1	C	40	12	12	Y	23838
P79345 NPC2_BOVIN	Epididymal secretory protein E1	C	63	19	19	Y	16640
tr A6QLT7 A6QLT7_BOVIN	EXOC6 protein	LF	1	2	0	N	93322
tr A7E323 A7E323_BOVIN	EXOSC10 protein	HF	3	2	2	Y	80336
P31976 EZRI_BOVIN	Ezrin	C	38	22	14	Y	68760
tr F1N0Q7 F1N0Q7_BOVIN	Farnesyl pyrophosphate synthase	HF	3	1	1	Y	95682
Q71SP7 FAS_BOVIN	Fatty acid synthase	HF	0	2	0	N	274552
tr O77779 O77779_BOVIN	Fertilin alpha (Fragment)	LF	2	1	1	Y	89905
tr Q2KJ89 Q2KJ89_BOVIN	Fibulin 5	C	10	6	6	Y	50178
Q5EA62 FBLN5_BOVIN	Fibulin-5	C	10	6	6	Y	50164
tr Q5FX62 Q5FX62_BOVIN	FLICE-like inhibitory protein	HF	6	2	1	Y	55554
A6QLR4 FLOT2_BOVIN	Flotillin-2	HF	7	1	1	Y	46995
tr G3X6T9 G3X6T9_BOVIN	Flotillin-2 (Fragment)	HF	8	1	1	Y	42328
P02702 FOLR1_BOVIN	Folate receptor alpha	C	32	5	4	Y	27922
tr E1BJL8 E1BJL8_BOVIN	Folate receptor alpha	C	23	4	3	Y	29753
tr F1MT42 F1MT42_BOVIN	Follicle-stimulating hormone receptor	HF	2	1	1	Y	78030
Q3SZB7 F16P1_BOVIN	Fructose-1 6-bisphosphatase 1	C	45	12	12	Y	36728
tr A6QLL8 A6QLL8_BOVIN	Fructose-bisphosphate aldolase	C	19	5	4	N	39436
tr Q3ZBY4 Q3ZBY4_BOVIN	Fructose-bisphosphate aldolase	HF	4	2	1	N	39382
A6H768 GALK1_BOVIN	Galactokinase	C	17	4	4	Y	42227
A7E3W2 LG3BP_BOVIN	Galectin-3-binding protein	C	49	22	21	Y	62127
A6QPN6 GILT_BOVIN	Gamma-interferon-inducible lysosomal thiol reductase	C	32	5	5	Y	27490
tr F1MAU3 F1MAU3_BOVIN	Gamma-interferon-inducible lysosomal thiol reductase	HF	32	5	5	Y	27548
tr A6QNJ8 A6QNJ8_BOVIN	GANAB protein (Fragment)	HF	9	6	6	N	109085
Q863C3 GRP_BOVIN	Gastrin-releasing peptide	C	39	4	4	N	14934
tr F1N1I6 F1N1I6_BOVIN	Gelsolin	C	65	35	32	Y	85687

tr F1MJH1 F1MJH1_BOVIN	Gelsolin	HF	70	35	32	Y	80703
Q32LB5 GPRL1_BOVIN	GLIPR1-like protein 1	C	37	7	7	Y	27167
Q3ZBD7 G6PI_BOVIN	Glucose-6-phosphate isomerase	C	65	27	27	Y	62855
Q2KHZ8 GLCM_BOVIN	Glucosylceramidase	HF	6	1	1	Y	59855
tr F1N1D5 F1N1D5_BOVIN	Glucosylceramidase	HF	6	1	1	Y	59841
tr Q0P598 Q0P598_BOVIN	Glutaminyl-peptide cyclotransferase	LF	40	7	7	Y	41205
Q28120 QPCT_BOVIN	Glutaminyl-peptide cyclotransferase	C	34	6	6	Y	41224
tr F1MEM5 F1MEM5_BOVIN	Glutamyl aminopeptidase	C	41	33	1	Y	109820
Q32LQ0 AMPE_BOVIN	Glutamyl aminopeptidase	HF	41	33	1	Y	109801
tr G3N2N9 G3N2N9_BOVIN	Glutathione peroxidase	C	73	16	10	Y	25083
tr G3X8D7 G3X8D7_BOVIN	Glutathione peroxidase	C	40	14	8	Y	25341
tr F1MCF5 F1MCF5_BOVIN	Glutathione peroxidase (Fragment)	C	65	16	9	Y	15659
P37141 GPX3_BOVIN	Glutathione peroxidase 3	C	40	14	8	Y	25663
Q9N0V4 GSTM1_BOVIN	Glutathione S-transferase Mu 1	HF	18	3	2	Y	25635
tr Q2KIV8 Q2KIV8_BOVIN	Glutathione S-transferase mu 3 (Brain)	C	35	6	5	Y	26850
Q2KJE5 G3PT_BOVIN	Glyceraldehyde-3-phosphate dehydrogenase testis-specific	C	10	2	2	N	43288
tr A5PKD6 A5PKD6_BOVIN	GNB4 protein	C	3	1	1	N	37537
tr Q0VD58 Q0VD58_BOVIN	Golgi-localized protein	HF	2	2	0	N	57258
tr A6QLI3 A6QLI3_BOVIN	GOLSYN protein	HF	2	2	0	N	73752
tr A4IF70 A4IF70_BOVIN	GPR56 protein	HF	5	2	2	N	76954
tr Q2HJI6 Q2HJI6_BOVIN	Granulin	C	17	3	3	Y	63054
tr A7E3V7 A7E3V7_BOVIN	Guanine nucleotide-binding protein beta-1 subunit (Fragment)	C	3	1	1	N	37030
P62871 GBB1_BOVIN	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1	C	3	1	1	N	37377
P11017 GBB2_BOVIN	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-2	C	3	1	1	N	37331
P04896 GNAS2_BOVIN	Guanine nucleotide-binding protein G(s) subunit alpha isoforms short	HF	15	3	3	Y	45709
P38409 GNA11_BOVIN	Guanine nucleotide-binding protein subunit alpha- 11	LF	4	1	1	N	42070
P38408 GNA14_BOVIN	Guanine nucleotide-binding protein subunit alpha- 14	LF	4	1	1	N	41499

tr M5FI09 M5FI09_BOVIN	HCG1658583-like	HF	1	2	1	N	113815
Q0P565 HDDC2_BOVIN	HD domain-containing protein 2	HF	8	1	1	N	23323
tr Q2YDE6 Q2YDE6_BOVIN	HDLBP protein (Fragment)	HF	6	2	1	Y	32663
Q2TBX4 HSP13_BOVIN	Heat shock 70 kDa protein 13	C	33	12	12	Y	51921
P0CB32 HS71L_BOVIN	Heat shock 70 kDa protein 1-like	C	33	17	8	Y	70389
tr A7E3S8 A7E3S8_BOVIN	Heat shock 70kD protein binding protein	C	12	4	4	N	41445
P19120 HSP7C_BOVIN	Heat shock cognate 71 kDa protein	C	9	6	0	N	71241
tr K8FK38 K8FK38_BOVIN	Heat Shock Protein 70 (Fragment)	HF	15	9	2	N	69421
Q76LV2 HS90A_BOVIN	Heat shock protein HSP 90-alpha	C	42	27	24	Y	84731
tr G3N2V5 G3N2V5_BOVIN	Heat shock protein HSP 90-beta	C	4	4	1	Y	82206
P34933 HSP72_BOVIN	Heat shock-related 70 kDa protein 2	HF	9	6	0	N	69740
Q3SZV7 HEMO_BOVIN	Hemopexin	C	27	6	6	Y	52209
Q9MYY0 HPSE_BOVIN	Heparanase	HF	4	1	1	N	61077
tr F1N1G1 F1N1G1_BOVIN	Heparanase	HF	4	1	1	N	61133
Q5E9J1 HNRPF_BOVIN	Heterogeneous nuclear ribonucleoprotein F	LF	2	1	1	N	45689
	Heterogeneous nuclear ribonucleoprotein U						
tr A2VDN7 A2VDN7_BOVIN	(Scaffold attachment factor A)	HF	1	1	1	Y	90453
tr Q5W5U3 Q5W5U3_BOVIN	Hexokinase	C	10	10	8	N	102207
tr F1MZV1 F1MZV1_BOVIN	Hexokinase	C	10	10	8	N	102294
tr F1MIM3 F1MIM3_BOVIN	Hexokinase	HF	2	3	1	Y	102579
tr E1BLX2 E1BLX2_BOVIN	Histone-lysine N-methyltransferase	LF	0	1	1	N	186042
tr F1MNT3 F1MNT3_BOVIN	Hormone-sensitive lipase	C	22	9	7	Y	82639
tr Q2YDK3 Q2YDK3_BOVIN	Hyaluronidase	C	9	3	3	Y	62299
tr F1MTV1 F1MTV1_BOVIN	Hyaluronidase	C	9	3	3	Y	62281
tr Q05B55 Q05B55_BOVIN	IGK protein	C	20	3	3	N	26591
tr B0JYP6 B0JYP6_BOVIN	IGK protein	C	20	3	3	N	26320
tr Q3T101 Q3T101_BOVIN	IGL@ protein	LF	41	9	1	Y	24640
tr Q1RMN8 Q1RMN8_BOVIN	Immunoglobulin light chain lambda gene cluster	LF	43	9	1	Y	24536
Q70IB2 RNS10_BOVIN	Inactive ribonuclease-like protein 10	C	38	8	8	Y	23363
tr F1MUJ4 F1MUJ4_BOVIN	Inactive serine protease PAMR1	LF	2	2	1	N	80027
Q2NL29 INO1_BOVIN	Inositol-3-phosphate synthase 1	C	12	4	4	Y	60761
tr B8QGI3 B8QGI3_BOVIN	Insulin-like growth factor 2	C	5	1	1	Y	19682
tr I3PGL3 I3PGL3_BOVIN	Insulin-like growth factor 2 (Fragment)	HF	6	1	1	Y	15557

tr Q2F6J3 Q2F6J3_BOVIN	Insulin-like growth factor 2 preproprotein (Fragment)	HF	9	1	1	Y	10782
tr I6XXP7 I6XXP7_BOVIN	Insulin-like growth factor binding protein 3	LF	25	6	6	Y	31570
P07456 IGF2_BOVIN	Insulin-like growth factor II	C	5	1	1	Y	19682
P20959 IBP3_BOVIN	Insulin-like growth factor-binding protein 3	LF	25	6	6	Y	31570
Q05717 IBP5_BOVIN	Insulin-like growth factor-binding protein 5	C	13	3	3	Y	30314
tr F1N026 F1N026_BOVIN	Integral membrane protein 2B	C	23	4	4	N	30386
Q3T0P7 ITM2B_BOVIN	Integral membrane protein 2B	LF	19	3	3	Y	30400
tr Q2TBX9 Q2TBX9_BOVIN	Integrin alpha FG-GAP repeat containing 1	C	2	1	1	N	67805
tr D3WYX5 D3WYX5_BOVIN	Interleukin-1 receptor-associated kinase I transcript variant 2	HF	2	2	1	N	70585
tr A2VDQ0 A2VDQ0_BOVIN	Intraflagellar transport 81 homolog (Chlamydomonas)	HF	1	1	1	Y	79485
tr Q0QEQ4 Q0QEQ4_BOVIN	Isocitrate dehydrogenase 1 (Fragment)	HF	11	3	3	N	41342
Q58CS8-2 GNPTG_BOVIN	Isoform 2 of N-acetylglucosamine-1-phosphotransferase subunit gamma	C	11	2	2	N	31407
P33545-2 DSC2_BOVIN	Isoform 2B of Desmocollin-2	LF	7	2	2	N	89768
Q9BGI1-2 PRDX5_BOVIN	Isoform Cytoplasmic+peroxisomal of Peroxiredoxin-5 mitochondrial	C	64	10	10	Y	17362
P23795-2 ACES_BOVIN	Isoform H of Acetylcholinesterase	HF	2	3	0	N	66908
Q9XT56 JAM1_BOVIN	Junctional adhesion molecule A	HF	5	1	1	N	32456
tr A6H7J0 A6H7J0_BOVIN	KCNA2 protein	HF	1	1	1	Y	56747
tr A0JN12 A0JN12_BOVIN	Kelch-like 10 (Drosophila)	HF	4	2	2	N	68817
Q5XQN5 K2C5_BOVIN	Keratin type II cytoskeletal 5	HF	2	1	1	N	62937
tr M0QVZ6 M0QVZ6_BOVIN	Keratin type II cytoskeletal 5	HF	2	1	1	N	60667
tr A7YVI7 A7YVI7_BOVIN	KIAA0415 protein (Fragment)	LF	2	2	1	N	81606
tr E1BEN3 E1BEN3_BOVIN	Kinesin-like protein	C	1	1	1	N	115147
tr G3X690 G3X690_BOVIN	Kinesin-like protein	HF	1	2	1	Y	157581
tr E1BG49 E1BG49_BOVIN	Kinesin-like protein	HF	0	1	0	N	317118
tr E1B715 E1B715_BOVIN	Kinesin-like protein	HF	2	2	1	N	89819
tr Q0V8E3 Q0V8E3_BOVIN	Kinesin-like protein (Fragment)	C	1	1	1	N	56925
tr G3MXV5 G3MXV5_BOVIN	Kinesin-like protein (Fragment)	LF	0	1	1	Y	190628
tr F1MJK2 F1MJK2_BOVIN	Kinesin-like protein (Fragment)	LF	0	1	1	Y	197032
tr A5D7M6 A5D7M6_BOVIN	KRT5 protein	HF	2	1	1	N	62683

tr A4FV94 A4FV94_BOVIN	KRT6A protein	HF	2	1	1	N	60820
tr F1MXX6 F1MXX6_BOVIN	Lactadherin	C	23	9	9	Y	47846
Q95114 MFGM_BOVIN	Lactadherin	C	24	9	9	Y	47411
tr B9VPZ5 B9VPZ5_BOVIN	Lactoferrin	C	62	49	3	Y	78056
tr B3VTM3 B3VTM3_BOVIN	Lactoferrin	C	62	47	1	Y	78056
tr C7FE01 C7FE01_BOVIN	Lactoferrin (Fragment)	C	63	49	3	Y	76275
P24627 TRFL_BOVIN	Lactotransferrin	C	62	49	3	Y	78056
Q95M12 LGMN_BOVIN	Legumain	C	22	8	8	Y	49284
tr A1L542 A1L542_BOVIN	Leucine rich repeat containing 8 family member E (Fragment)	HF	2	2	0	Y	69094
tr Q29396 Q29396_BOVIN	Leucine-rich glycoprotein homolog protein (Fragment)	LF	10	1	1	N	25653
tr E1BNS9 E1BNS9_BOVIN	L-lactate dehydrogenase	C	30	9	7	Y	36015
P19858 LDHA_BOVIN	L-lactate dehydrogenase A chain	C	11	3	1	Y	36598
tr A7YY63 A7YY63_BOVIN	LOC100124517 protein	HF	1	1	0	N	74694
tr A8E4M5 A8E4M5_BOVIN	LOC100126170 protein	HF	0	1	1	N	151226
tr A6QQ58 A6QQ58_BOVIN	LOC504248 protein	HF	9	2	2	Y	35727
tr A8E4Q3 A8E4Q3_BOVIN	LOC511106 protein	HF	10	3	1	Y	44057
tr A6QPD4 A6QPD4_BOVIN	LOC790886 protein	HF	11	5	1	Y	45428
Q3SX23 LONP2_BOVIN	Lon protease homolog 2 peroxisomal	LF	1	1	1	N	94310
Q32LD3 LYPD4_BOVIN	Ly6/PLAUR domain-containing protein 4	C	15	3	3	Y	26872
Q9MYM4 LYAG_BOVIN	Lysosomal alpha-glucosidase	C	16	11	11	Y	104757
Q29451 MA2B1_BOVIN	Lysosomal alpha-mannosidase	C	18	11	10	Y	112919
Q3MI05 PPGB_BOVIN	Lysosomal protective protein	C	31	14	14	Y	53980
tr Q3SZJ7 Q3SZJ7_BOVIN	Lysosomal-associated membrane protein 2	HF	2	1	1	Y	44543
Q9TTK4 LYST_BOVIN	Lysosomal-trafficking regulator	C	0	2	1	N	428603
tr F1MLZ4 F1MLZ4_BOVIN	Lysosomal-trafficking regulator	LF	0	1	0	N	428547
tr A0A077S1J5 A0A077S1J5_BOVIN	Lysozyme A	LF	16	2	2	N	16293
Q2T9N7 LYZL4_BOVIN	Lysozyme-like protein 4	LF	16	2	2	N	16293
tr G3X7E0 G3X7E0_BOVIN	Lysozyme-like protein 4	LF	16	2	2	N	16293
Q8MJ24 LOXL4_BOVIN	Lysyl oxidase homolog 4	LF	3	1	1	Y	84050
tr G1K200 G1K200_BOVIN	Lysyl oxidase homolog 4 (Fragment)	LF	4	1	1	Y	60036
P80177 MIF_BOVIN	Macrophage migration inhibitory factor	C	17	2	2	Y	12343
tr A0A0F7RPX0 A0A0F7RPX0_BOVIN	Macrophage migration inhibitory factor	C	17	2	2	Y	12343

tr Q9XS94 Q9XS94_BOVIN	Major fibrous sheath protein	LF	3	2	2	Y	93988
tr A8WDJ5 A8WDJ5_BOVIN	Major prion protein	C	9	2	2	Y	29391
P10279 PRIO_BOVIN	Major prion protein	C	9	2	2	Y	28614
tr K7ZJV0 K7ZJV0_BOVIN	Major prion protein	C	9	2	2	Y	27810
tr A7J4K5 A7J4K5_BOVIN	Major prion protein	C	9	2	2	Y	27837
tr Q2LDZ4 Q2LDZ4_BOVIN	Major prion protein	C	9	2	2	Y	28661
tr D5G2D5 D5G2D5_BOVIN	Major prion protein	C	9	2	2	Y	28636
tr B3F6B5 B3F6B5_BOVIN	Major prion protein	C	9	2	2	Y	28676
tr A6YK35 A6YK35_BOVIN	Major prion protein	C	9	2	2	Y	28614
tr Q864M0 Q864M0_BOVIN	Major prion protein	C	9	2	2	Y	28596
tr B3GRV8 B3GRV8_BOVIN	Major prion protein (Fragment)	C	11	2	2	Y	23470
tr Q6EIP9 Q6EIP9_BOVIN	Major prion protein (Fragment)	C	25	2	2	Y	11714
Q3T145 MDHC_BOVIN	Malate dehydrogenase cytoplasmic	C	13	3	3	Y	36438
tr B8Y898 B8Y898_BOVIN	Malic enzyme	C	11	3	3	N	63894
tr F1N3V0 F1N3V0_BOVIN	Malic enzyme	C	11	3	3	N	63787
A6QLI0 EPDR1_BOVIN	Mammalian ependymin-related protein 1	C	16	4	4	Y	26485
Q3SZI0 MPL_BOVIN	Mannose-6-phosphate isomerase	C	24	6	6	Y	46369
tr F1N327 F1N327_BOVIN	Mannose-6-phosphate isomerase	C	24	6	6	Y	45958
tr A5D7D5 A5D7D5_BOVIN	MATN2 protein	HF	5	4	4	Y	106824
tr A6H749 A6H749_BOVIN	MATN4 protein	HF	16	1	1	Y	14106
tr A6QPN5 A6QPN5_BOVIN	Matrix metalloproteinase 2 (Gelatinase A 72kDa gelatinase 72kDa type IV collagenase)	C	10	2	2	N	73834
me M02769 ALBU_BOVIN	mature Serum albumin removed signal and pro-peptides at N-term	C	77	54	53	Y	66433
tr A6QQ22 A6QQ22_BOVIN	MCFD2 protein (Fragment)	LF	10	1	1	N	18908
tr G3MWX4 G3MWX4_BOVIN	Membrane cofactor protein	LF	16	3	3	Y	37149
tr F1N4W4 F1N4W4_BOVIN	Membrane cofactor protein	C	18	4	3	Y	39421
tr A0A060INZ0 A0A060INZ0_BOVIN	Membrane cofactor protein	LF	15	3	3	Y	39744
tr A0A060IE95 A0A060IE95_BOVIN	Membrane cofactor protein	LF	15	3	3	Y	39801
tr A6QNU3 A6QNU3_BOVIN	Membrane cofactor protein	LF	16	3	3	Y	37263
tr F6K7I9 F6K7I9_BOVIN	Membrane cofactor protein	LF	15	3	3	Y	40134
tr F1N4W5 F1N4W5_BOVIN	Membrane cofactor protein	LF	15	3	3	Y	39944
tr F1N430 F1N430_BOVIN	Metalloproteinase inhibitor 2	C	84	61	59	Y	24387
tr Q3T0K7 Q3T0K7_BOVIN	MFGE8 protein	HF	23	9	9	Y	47862

tr Q5E9I4 Q5E9I4_BOVIN	MGAT1 protein	LF	4	1	1	N	51702
tr A5D7E1 A5D7E1_BOVIN	MGC139254 protein	HF	10	5	1	Y	60931
tr A4IF76 A4IF76_BOVIN	MGC140461 protein	C	12	3	3	Y	24456
tr A6QPE2 A6QPE2_BOVIN	MGC148336 protein	LF	8	1	1	N	17816
tr Q9N0E6 Q9N0E6_BOVIN	Midkine	C	43	5	5	Y	15683
tr Q3SZ28 Q3SZ28_BOVIN	Midkine (Neurite growth-promoting factor 2)	C	43	5	5	Y	15743
tr A5D9E8 A5D9E8_BOVIN	Mimecan	C	27	6	6	N	34196
tr G3N088 G3N088_BOVIN	Mimecan	C	23	6	6	N	40598
P19879 MIME_BOVIN	Mimecan	C	27	6	6	N	34209
tr G1K237 G1K237_BOVIN	Mitochondrial Rho GTPase	LF	4	1	1	Y	72032
Q2HJF8 MIRO1_BOVIN	Mitochondrial Rho GTPase 1	LF	4	1	1	Y	72078
tr A6H797 A6H797_BOVIN	MLEC protein	C	9	2	2	N	31566
tr Q9N282 Q9N282_BOVIN	MMP-9 (Fragment)	HF	3	1	1	Y	36274
Q2HJ49 MOES_BOVIN	Moesin	HF	11	8	1	N	67975
tr A6QNL0 A6QNL0_BOVIN	Monocyte differentiation antigen CD14	C	10	3	3	Y	39922
Q95122 CD14_BOVIN	Monocyte differentiation antigen CD14	HF	10	3	3	Y	39667
tr A8DBT6 A8DBT6_BOVIN	Monocyte differentiation antigen CD14	HF	10	3	3	Y	39668
A5D7P0 MPIP3_BOVIN	M-phase inducer phosphatase 3	LF	2	1	1	N	53794
tr A6QP39 A6QP39_BOVIN	MSLN protein	C	62	24	22	Y	44291
tr A7E340 A7E340_BOVIN	Mucin 15 cell surface associated	HF	3	1	1	N	35685
Q8MI01 MUC15_BOVIN	Mucin-15	HF	3	1	1	N	35715
tr E1BGW1 E1BGW1_BOVIN	Mucin-15	HF	3	1	1	N	35683
	Multiple inositol polyphosphate histidine phosphatase 1	LF	4	1	1	Y	41435
tr Q2TBT6 Q2TBT6_BOVIN	phosphatase 1	LF	4	1	1	Y	41435
tr A6QLD6 A6QLD6_BOVIN	MYO1B protein	HF	1	1	1	Y	131830
Q27991 MYH10_BOVIN	Myosin-10	HF	1	2	1	N	229097
Q9BE39 MYH7_BOVIN	Myosin-7	HF	1	2	1	N	223227
tr F1N2G0 F1N2G0_BOVIN	Myosin-7	HF	1	2	1	N	223964
	N-acetylglucosamine-1-phosphotransferase subunit gamma	C	10	2	2	N	33783
Q58CS8 GNPTG_BOVIN	N-acetylglucosamine-1-phosphotransferase subunit gamma	C	10	2	2	N	33783
tr M5FJT7 M5FJT7_BOVIN	subunit gamma	C	11	2	2	N	31407
Q1LZH9 GNS_BOVIN	N-acetylglucosamine-6-sulfatase	C	23	8	8	Y	62776
tr F1MXZ0 F1MXZ0_BOVIN	N-acetylglucosamine-6-sulfatase	C	23	8	8	Y	62800

tr Q3T074 Q3T074_BOVIN	NAD(P)(+)--arginine ADP-ribosyltransferase	C	5	2	1	Y	43998
tr F1MUE3 F1MUE3_BOVIN	NAD(P)(+)--arginine ADP-ribosyltransferase	C	5	2	1	Y	43969
tr E1BI74 E1BI74_BOVIN	NAD(P)(+)--arginine ADP-ribosyltransferase (Fragment)	C	39	12	11	Y	33700
tr A6QM01 A6QM01_BOVIN	NAGLU protein	C	11	3	3	Y	74076
tr A6QNZ3 A6QNZ3_BOVIN	NCOA7 protein	HF	3	1	1	N	25239
tr A6QPQ1 A6QPQ1_BOVIN	NEPN protein	HF	2	2	0	N	58005
P02548 NFL_BOVIN	Neurofilament light polypeptide	LF	5	3	2	Y	62646
tr Q71UA5 Q71UA5_BOVIN	Neutrophil beta-defensin 12 (Fragment)	HF	33	3	1	Y	6464
tr A7Z034 A7Z034_BOVIN	NFKB1 protein	LF	1	1	1	N	105463
tr Q1RMU0 Q1RMU0_BOVIN	NGFI-A binding protein 2 (EGR1 binding protein 2)	HF	2	2	0	N	56513
tr Q3SZQ1 Q3SZQ1_BOVIN	Nicastrin	HF	8	2	2	N	79073
tr A2VDU4 A2VDU4_BOVIN	NR1I2 protein	HF	1	1	1	N	48525
A5D7E9 NF2L1_BOVIN	Nuclear factor erythroid 2-related factor 1	LF	2	3	1	N	83607
tr Q1KNJ0 Q1KNJ0_BOVIN	Nuclear factor of kappa light polypeptide enhancer in B-cells 1	HF	1	1	1	N	105488
Q32KP9 NTF2_BOVIN	Nuclear transport factor 2	C	34	2	2	Y	14478
tr Q0IIH5 Q0IIH5_BOVIN	Nucleobindin 2	C	54	23	22	Y	49189
Q0P569 NUCB1_BOVIN	Nucleobindin-1	C	61	35	34	Y	54982
tr Q3SZ56 Q3SZ56_BOVIN	Nucleoporin 88kDa	C	3	3	1	Y	83772
tr A1A4N9 A1A4N9_BOVIN	Nucleoside diphosphate kinase	HF	62	6	4	Y	17325
P52175 NDKA2_BOVIN	Nucleoside diphosphate kinase A 2	HF	62	6	4	Y	17298
Q3T0Q4 NDKB_BOVIN	Nucleoside diphosphate kinase B	HF	61	6	4	Y	17316
Q32KV6 SIL1_BOVIN	Nucleotide exchange factor SIL1	C	11	5	5	Y	52581
tr A7MBI8 A7MBI8_BOVIN	NUDT9 protein	LF	3	1	1	N	38612
tr A6QM02 A6QM02_BOVIN	NUP188 protein	LF	0	1	1	N	196262
tr Q3T085 Q3T085_BOVIN	OGN protein	C	27	6	6	N	34197
tr G3X858 G3X858_BOVIN	Olfactory receptor	HF	2	1	1	N	36815
tr Q17QF1 Q17QF1_BOVIN	Oncostatin M receptor	C	13	3	3	Y	37601
P31096 OSTP_BOVIN	Osteopontin	C	57	36	7	Y	30904
tr Q2QCT5 Q2QCT5_BOVIN	Osteopontin (Fragment)	C	56	30	1	Y	29172
P45478 PPT1_BOVIN	Palmitoyl-protein thioesterase 1	C	25	4	4	Y	34142
tr F1MSA1 F1MSA1_BOVIN	Palmitoyl-protein thioesterase 1	C	25	4	4	Y	34089

tr M5FKI8 M5FKI8_BOVIN	Pancreatic adenocarcinoma upregulated factor-like	C	68	9	9	N	16970
P00974 BPT1_BOVIN	Pancreatic trypsin inhibitor	C	13	1	1	Y	10903
Q58CQ9 VNN1_BOVIN	Pantetheinase	C	23	7	7	Y	56947
tr A5D7Q6 A5D7Q6_BOVIN	PCDHGA2 protein	C	6	3	3	Y	90476
tr A4IFR2 A4IFR2_BOVIN	PCSK1N protein	C	36	7	6	N	27284
tr A6QNL5 A6QNL5_BOVIN	PDIA6 protein (Fragment)	LF	3	1	1	N	49624
tr A1A4Q6 A1A4Q6_BOVIN	Peptidase inhibitor 3 skin-derived (SKALP)	HF	19	3	1	N	18376
tr Q2NKS8 Q2NKS8_BOVIN	Peptidyl-prolyl cis-trans isomerase	HF	44	3	3	N	11945
P80311 PPIB_BOVIN	Peptidyl-prolyl cis-trans isomerase B	C	62	19	18	Y	23744
Q9BGI2 PRDX4_BOVIN	Peroxiredoxin-4	HF	16	3	3	Y	30741
Q9BGI1 PRDX5_BOVIN	Peroxiredoxin-5 mitochondrial	C	47	10	10	Y	23253
tr A6QPB5 A6QPB5_BOVIN	PGM1 protein	HF	2	1	1	N	62197
P13696 PEBP1_BOVIN	Phosphatidylethanolamine-binding protein 1	C	40	5	5	N	20986
tr Q3T010 Q3T010_BOVIN	Phosphatidylethanolamine-binding protein 4	C	63	10	10	Y	25146
P32871 PK3CA_BOVIN	Phosphatidylinositol 4 5-bisphosphate 3-kinase catalytic subunit alpha isoform	C	1	2	0	N	124328
O02811 PI4KA_BOVIN	Phosphatidylinositol 4-kinase alpha	HF	2	2	1	Y	229390
tr F1MJS4 F1MJS4_BOVIN	Phosphoglucomutase-1	HF	2	1	1	N	62196
Q08DP0 PGM1_BOVIN	Phosphoglucomutase-1	HF	2	1	1	N	61589
tr Q32KN6 Q32KN6_BOVIN	Phosphoglycerate kinase	C	74	32	24	Y	44758
Q3T0P6 PGK1_BOVIN	Phosphoglycerate kinase 1	C	21	7	0	Y	44538
Q32KV0 PGAM2_BOVIN	Phosphoglycerate mutase 2	C	59	15	14	Y	28685
tr F1N2F2 F1N2F2_BOVIN	Phosphoglycerate mutase 2	C	59	15	14	Y	28699
tr M5FJY9 M5FJY9_BOVIN	Phosphoglycolate phosphatase	C	24	5	5	Y	34320
Q2T9S4 PGP_BOVIN	Phosphoglycolate phosphatase	C	24	5	5	Y	34320
tr F1MSD7 F1MSD7_BOVIN	Phosphoinositide phospholipase C	LF	1	1	1	N	136216
tr Q1RML9 Q1RML9_BOVIN	Phospholipase A2 group VII (Platelet-activating factor acetylhydrolase plasma)	HF	75	47	2	Y	50151
tr Q9TS13 Q9TS13_BOVIN	Phospholipase C beta (Fragment)	HF	5	1	1	N	21128
tr F1MZ89 F1MZ89_BOVIN	Phospholipid-transporting ATPase (Fragment)	C	1	1	1	N	166459
tr E1BN81 E1BN81_BOVIN	Phospholipid-transporting ATPase (Fragment)	C	2	1	1	N	116596
Q95121 PEDF_BOVIN	Pigment epithelium-derived factor	LF	12	2	2	N	46229
tr Q5S1W6 Q5S1W6_BOVIN	PITSLRE protein kinase beta 1	HF	4	2	1	N	49529
tr V6F953 V6F953_BOVIN	Placenta-expressed transcript 1 protein	C	32	8	8	Y	26609

A5D7U1 PLET1_BOVIN	Placenta-expressed transcript 1 protein	C	32	8	8	Y	26609
Q9N2I2 IPSP_BOVIN	Plasma serine protease inhibitor	C	73	31	29	Y	45297
Q28017 PAFA_BOVIN	Platelet-activating factor acetylhydrolase	C	74	52	50	Y	50133
Q2KJ15 PDGFA_BOVIN	Platelet-derived growth factor subunit A	LF	12	2	2	N	24009
tr F1N2P4 F1N2P4_BOVIN	Platelet-derived growth factor subunit A	LF	12	2	2	N	24027
tr A0JN47 A0JN47_BOVIN	Plexin domain containing 2	C	11	4	4	N	59468
tr C0SQ70 C0SQ70_BOVIN	Plexin domain containing 2	C	11	4	4	N	59215
tr Q17QC7 Q17QC7_BOVIN	Poliovirus receptor-related 2 (Herpesvirus entry mediator B)	C	4	1	1	N	43262
P18493 PARP1_BOVIN	Poly [ADP-ribose] polymerase 1	LF	1	1	1	N	113486
tr F1MU08 F1MU08_BOVIN	Poly [ADP-ribose] polymerase 1	LF	1	1	1	N	113368
Q4GZT3 PKD2_BOVIN	Polycystin-2	LF	2	2	1	Y	109789
P81265 PIGR_BOVIN	Polymeric immunoglobulin receptor	C	17	6	6	Y	82435
tr E1B9U7 E1B9U7_BOVIN	Polypeptide N-acetylgalactosaminyltransferase	HF	2	2	0	N	67746
tr F1N554 F1N554_BOVIN	Polypeptide N-acetylgalactosaminyltransferase (Fragment)	C	19	6	5	Y	63425
P0CG53 UBB_BOVIN	Polyubiquitin-B	LF	15	5	5	Y	34308
P0CH28 UBC_BOVIN	Polyubiquitin-C	LF	7	5	5	Y	77570
tr E1B9K1 E1B9K1_BOVIN	Polyubiquitin-C	LF	15	5	5	Y	34366
tr Q08635 Q08635_BOVIN	Potassium channel (BGK5) (Fragment)	HF	1	1	1	Y	54153
tr Q08D98 Q08D98_BOVIN	PPP2R5D protein (Fragment)	HF	2	2	0	N	71823
A6QLY7 PBIP1_BOVIN	Pre-B-cell leukemia transcription factor-interacting protein 1	C	12	5	5	Y	80258
O77588 PLOD1_BOVIN	Procollagen-lysine 2-oxoglutarate 5-dioxygenase 1	C	32	15	15	Y	83487
P26779 SAP_BOVIN	Prosaposin	C	70	33	5	Y	58051
tr A1L555 A1L555_BOVIN	Prosaposin	C	58	30	2	Y	58168
tr B1H0W7 B1H0W7_BOVIN	Prostaglandin D2 synthase 21kDa (Brain)	C	46	8	7	Y	21229
Q32L99 PTGR2_BOVIN	Prostaglandin reductase 2	C	23	4	4	Y	38400
O02853 PTGDS_BOVIN	Prostaglandin-H2 D-isomerase	C	46	8	7	Y	21229
A6H730 PPAP_BOVIN	Prostatic acid phosphatase	HF	11	3	3	Y	44622
tr M5FI38 M5FI38_BOVIN	Protease serine 22-like	HF	19	3	3	Y	32255
tr Q08DU0 Q08DU0_BOVIN	Protease serine 8	C	22	5	5	Y	36709
tr Q1JP95 Q1JP95_BOVIN	Proteasome 26S ATPase subunit 3 (Fragment)	HF	4	1	1	N	47995
tr E1BD83 E1BD83_BOVIN	Proteasome subunit alpha type	C	4	1	1	N	29203

tr G5E5C3 G5E5C3_BOVIN	Proteasome subunit alpha type	HF	17	3	3	Y	27284
tr A7E3D5 A7E3D5_BOVIN	Proteasome subunit alpha type (Fragment)	HF	5	1	1	N	26567
Q3T0X5 PSA1_BOVIN	Proteasome subunit alpha type-1	C	30	5	5	Y	29586
Q3ZCK9 PSA4_BOVIN	Proteasome subunit alpha type-4	C	24	4	4	Y	29484
Q2YDE4 PSA6_BOVIN	Proteasome subunit alpha type-6	HF	17	3	3	Y	27399
Q3ZBG0 PSA7_BOVIN	Proteasome subunit alpha type-7	HF	4	1	1	N	27869
tr G5E589 G5E589_BOVIN	Proteasome subunit beta type	C	28	5	5	Y	26318
tr B0JYN8 B0JYN8_BOVIN	Proteasome subunit beta type	HF	18	3	3	N	22993
Q2TBX6 PSB1_BOVIN	Proteasome subunit beta type-1	C	28	5	5	Y	26246
Q5E9K0 PSB2_BOVIN	Proteasome subunit beta type-2	C	21	2	2	N	22896
P33672 PSB3_BOVIN	Proteasome subunit beta type-3	HF	18	3	3	N	22993
Q32KL2 PSB5_BOVIN	Proteasome subunit beta type-5	C	24	4	4	Y	28609
Q3MHN0 PSB6_BOVIN	Proteasome subunit beta type-6	HF	21	2	2	Y	25542
tr F1MTI7 F1MTI7_BOVIN	Protein CutA	C	68	6	6	Y	16446
tr F1N5T0 F1N5T0_BOVIN	Protein CutA	C	59	6	6	Y	18932
Q5E946 PARK7_BOVIN	Protein deglycase DJ-1	C	33	6	6	Y	20035
	Protein disulfide isomerase-associated 6 (Fragment)	LF	7	1	1	N	22158
tr Q0V8C4 Q0V8C4_BOVIN	Protein disulfide-isomerase	C	8	2	2	N	57204
tr A6H7J6 A6H7J6_BOVIN	Protein disulfide-isomerase	C	2	1	1	N	56930
tr A5D7E8 A5D7E8_BOVIN	Protein disulfide-isomerase	LF	5	2	2	N	57266
P05307 PDIA1_BOVIN	Protein disulfide-isomerase	LF	5	2	2	N	57266
P38657 PDIA3_BOVIN	Protein disulfide-isomerase A3	C	2	1	1	N	56930
A5PKI3 FAM3C_BOVIN	Protein FAM3C	C	32	6	6	Y	24797
Q3B7M3 FA65B_BOVIN	Protein FAM65B	HF	1	2	0	N	111933
	Protein kinase C and casein kinase substrate in neurons 2	LF	2	1	1	N	55891
tr Q1RMR9 Q1RMR9_BOVIN	Protein OS-9	C	4	2	2	N	75807
tr F1MX65 F1MX65_BOVIN	Protein OS-9	C	4	2	2	N	75779
Q3MHX6 OS9_BOVIN	Protein OS-9	C	4	2	2	N	75779
Q3T0W4 PP1R7_BOVIN	Protein phosphatase 1 regulatory subunit 7	HF	5	1	1	N	41388
tr Q0VC12 Q0VC12_BOVIN	Protein YIPF	LF	3	1	1	N	37987
Q3SYY2 TPST2_BOVIN	Protein-tyrosine sulfotransferase 2	C	12	4	3	Y	41967
tr F1MKG9 F1MKG9_BOVIN	Protein-tyrosine sulfotransferase 2	LF	12	2	2	N	41957
tr Q3SZ81 Q3SZ81_BOVIN	PSMC3 protein (Fragment)	HF	3	1	1	N	48094
tr Q687I9 Q687I9_BOVIN	Purine nucleoside phosphorylase	LF	3	1	1	N	32067

P55859 PNPH_BOVIN	Purine nucleoside phosphorylase	LF	3	1	1	N	32037
tr Q9BEG4 Q9BEG4_BOVIN	Putative alpha-2 3-sialyltransferase (Fragment)	C	8	2	2	N	37322
tr F1MIH9 F1MIH9_BOVIN	Putative phospholipase B-like 2	C	20	7	7	Y	65723
tr A5D7Q2 A5D7Q2_BOVIN	Putative uncharacterized protein	C	26	7	7	Y	51671
tr Q58D51 Q58D51_BOVIN	Putative uncharacterized protein DKFZp313G1735	LF	10	3	3	N	61353
tr Q0V8I4 Q0V8I4_BOVIN	Putative uncharacterized protein FLJ32810	HF	2	1	1	N	48446
tr Q2NKT7 Q2NKT7_BOVIN	Putative uncharacterized protein MGC137030	C	8	1	1	N	16149
tr A5D984 A5D984_BOVIN	Pyruvate kinase	HF	11	4	4	Y	57949
tr Q3ZC87 Q3ZC87_BOVIN	Pyruvate kinase (Fragment)	HF	10	4	4	Y	61428
P21856 GDIA_BOVIN	Rab GDP dissociation inhibitor alpha	C	33	9	4	Y	50566
P50397 GDIB_BOVIN	Rab GDP dissociation inhibitor beta	C	20	6	1	Y	50488
tr A6QLS9 A6QLS9_BOVIN	RAB10 protein	HF	10	2	1	N	22541
tr Q3ZBG1 Q3ZBG1_BOVIN	RAB14 protein	HF	12	2	1	N	23897
tr Q148J4 Q148J4_BOVIN	RAB2A member RAS oncogene family	LF	13	2	2	N	20851
Q32LP2 RADI_BOVIN	Radixin	C	12	9	0	N	68568
tr F1MJJ8 F1MJJ8_BOVIN	Radixin (Fragment)	C	12	9	0	N	68584
tr Q0VD52 Q0VD52_BOVIN	RAS guanyl releasing protein 3 (Calcium and DAG-regulated)	LF	1	1	1	Y	78224
Q2TA29 RB11A_BOVIN	Ras-related protein Rab-11A	LF	9	2	2	N	24470
tr F2Z4D5 F2Z4D5_BOVIN	Ras-related protein Rab-11A	LF	9	2	2	N	24394
Q3MHP2 RB11B_BOVIN	Ras-related protein Rab-11B	C	25	6	6	N	24488
A4FV54 RAB8A_BOVIN	Ras-related protein Rab-8A	HF	11	2	1	N	23684
Q2HJI8 RAB8B_BOVIN	Ras-related protein Rab-8B	HF	8	2	1	Y	23656
tr F1N2J9 F1N2J9_BOVIN	Ras-related protein Rab-8B	HF	8	2	1	Y	23686
P62833 RAP1A_BOVIN	Ras-related protein Rap-1A	HF	7	1	1	N	20987
P61223 RAP1B_BOVIN	Ras-related protein Rap-1b	HF	7	1	1	N	20825
Q2KI30 REEP2_BOVIN	Receptor expression-enhancing protein 2	LF	5	2	1	N	28440
tr F1MWF1 F1MWF1_BOVIN	Receptor protein-tyrosine kinase	HF	1	1	1	Y	151660
Q3SZ41 SUH_BOVIN	Recombining binding protein suppressor of hairless	HF	1	1	1	Y	54341
P81134 RENK_BOVIN	Renin receptor	C	46	10	9	Y	39491
tr G8JKY4 G8JKY4_BOVIN	Renin receptor (Fragment)	C	46	10	9	Y	39481
tr Q0VCQ9 Q0VCQ9_BOVIN	Reticulocalbin 2 EF-hand calcium binding domain	HF	39	10	10	N	36909
tr F1MF50 F1MF50_BOVIN	Rho-associated protein kinase	LF	2	3	1	Y	159760

tr Q58DP6 Q58DP6_BOVIN	Ribonuclease 4	C	52	10	10	Y	16938
tr W0UV03 W0UV03_BOVIN	Ribonuclease A C1	C	71	48	36	Y	16377
tr W0UVI3 W0UVI3_BOVIN	Ribonuclease A C2	C	47	20	7	Y	23701
tr W0UV85 W0UV85_BOVIN	Ribonuclease A K1	C	23	2	2	Y	24226
tr W0UV04 W0UV04_BOVIN	Ribonuclease A K2	C	42	7	7	Y	24367
tr W0UVF3 W0UVF3_BOVIN	Ribonuclease A M1	C	39	7	7	Y	17714
P61823 RNAS1_BOVIN	Ribonuclease pancreatic	C	67	20	7	Y	16461
Q3T114 UK114_BOVIN	Ribonuclease UK114	HF	10	1	1	N	14272
tr Q3SZN8 Q3SZN8_BOVIN	Ribonuclease/angiogenin inhibitor 1	HF	8	2	2	Y	48850
Q2HJ58 PRPS1_BOVIN	Ribose-phosphate pyrophosphokinase 1	HF	10	2	2	Y	34834
tr Q0III8 Q0III8_BOVIN	RNASET2 protein (Fragment)	C	25	6	5	Y	32830
P23439 PDE6B_BOVIN	Rod cGMP-specific 3' 5'-cyclic phosphodiesterase subunit beta	HF	1	2	0	N	98331
tr F1N0U0 F1N0U0_BOVIN	Rod cGMP-specific 3' 5'-cyclic phosphodiesterase subunit beta (Fragment)	HF	2	2	0	N	70884
Q0VCY0 AT2A1_BOVIN	Sarcoplasmic/endoplasmic reticulum calcium ATPase 1	LF	1	1	1	N	109290
tr A6QPK0 A6QPK0_BOVIN	SCGB2A2 protein	C	74	10	10	Y	10427
A0JNP2 SG1D_BOVIN	Secretoglobin family 1D member	C	52	4	4	Y	11294
A7MB70 SEM3C_BOVIN	Semaphorin-3C	C	14	7	6	Y	85237
P04557 SFP3_BOVIN	Seminal plasma protein A3	C	74	51	48	Y	16140
P81019 SFP4_BOVIN	Seminal plasma protein BSP-30 kDa	C	60	58	56	Y	21269
P02784 SFP1_BOVIN	Seminal plasma protein PDC-109	C	79	81	78	Y	15481
P00669 RNS_BOVIN	Seminal ribonuclease	C	71	48	36	Y	16377
tr Q2NKZ9 Q2NKZ9_BOVIN	Serine carboxypeptidase 1	HF	3	1	1	N	50841
tr A1L543 A1L543_BOVIN	Serine carboxypeptidase 1 protein	HF	3	1	1	N	45844
tr Q2TBS5 Q2TBS5_BOVIN	Serine peptidase inhibitor Kazal type 2 (Acrosin-trypsin inhibitor)	C	31	2	2	Y	9391
tr Q32KP8 Q32KP8_BOVIN	Serine peptidase inhibitor-like with Kunitz and WAP domains 1 (Eppin)	C	41	5	5	Y	15093
F1N152 HTRA1_BOVIN	Serine protease HTRA1	C	14	4	4	Y	51907
tr Q8HZY1 Q8HZY1_BOVIN	Serine protease inhibitor clade E member 2	C	79	37	2	Y	43877
P01001 ISK6_BOVIN	Serine protease inhibitor Kazal-type 6	C	20	1	1	Y	8663
A0JNI4 SRR_BOVIN	Serine racemase	HF	21	4	4	Y	36181

tr G3X6N3 G3X6N3_BOVIN	Serotransferrin	C	44	30	2	Y	77666
Q29443 TRFE_BOVIN	Serotransferrin	C	45	29	1	Y	77753
tr Q2HJF0 Q2HJF0_BOVIN	Serotransferrin-like	C	63	33	4	Y	69183
Q9TTE1 SPA31_BOVIN	Serpin A3-1	C	4	1	1	N	46237
A2I7M9 SPA32_BOVIN	Serpin A3-2	C	4	1	1	N	46237
tr A0A0A0MP92 A0A0A0MP92_BOVIN	Serpin A3-7	LF	7	3	2	N	47016
tr Q08DC0 Q08DC0_BOVIN	Serpin peptidase inhibitor clade E (Nexin	HF	79	37	2	Y	43891
P02769 ALBU_BOVIN	plasminogen activator inhibitor type 1) member 2	C	74	54	53	Y	69294
tr A4FV01 A4FV01_BOVIN	Serum albumin	HF	1	1	1	N	100354
tr Q2KI90 Q2KI90_BOVIN	SF3B2 protein	LF	21	8	8	Y	59727
A6BMK7 NEUR1_BOVIN	Sialic acid acetyltransferase	C	31	6	6	Y	45433
tr A5D960 A5D960_BOVIN	Sialidase-1	C	8	2	2	N	39002
Q3MHE8 SRPR_BOVIN	Sialyltransferase 4A	C	11	4	4	Y	69896
tr F1MNJ2 F1MNJ2_BOVIN	Signal recognition particle receptor subunit alpha	C	11	4	4	Y	65652
tr Q862Q3 Q862Q3_BOVIN	Signal recognition particle receptor subunit alpha	C	74	8	8	Y	11043
tr Q862K7 Q862K7_BOVIN	Similar to beta 2-microglobulin (Fragment)	HF	14	1	1	Y	9252
tr Q862G1 Q862G1_BOVIN	Similar to cytoplasmic dynein light chain 1	HF	6	1	1	Y	15728
tr Q3T0F0 Q3T0F0_BOVIN	(Fragment)	C	9	4	4	N	59445
tr Q08DL0 Q08DL0_BOVIN	Similar to insulin-like growth factor II (Fragment)	C	9	4	4	N	63183
Q32LM2 SGTA_BOVIN	SLC3A2 protein	HF	4	1	1	Y	34213
tr E1B8N5 E1B8N5_BOVIN	SLC3A2 protein	C	10	5	5	Y	113733
P58352 GTR3_BOVIN	Small glutamine-rich tetratricopeptide repeat-containing protein alpha	LF	7	3	3	N	54020
tr A2VDL2 A2VDL2_BOVIN	Sodium/potassium-transporting ATPase subunit alpha	LF	7	3	3	N	54119
tr Q58DQ6 Q58DQ6_BOVIN	Solute carrier family 2 facilitated glucose transporter member 3	C	10	4	4	N	55595
tr Q5EA54 Q5EA54_BOVIN	Solute carrier family 2 (Facilitated glucose transporter) member 3	C	9	4	4	N	63211
Q58D31 DHSO_BOVIN	Solute carrier family 3 (Activators of dibasic and neutral amino acid transport) member 2	C	25	6	6	Y	38099
	Solute carrier family 3 (Activators of dibasic and neutral amino acid transport) member 2	C					
	Sorbitol dehydrogenase	C					

tr F1MG03 F1MG03_BOVIN	Speckle targeted PIP5K1A-regulated poly(A) polymerase	LF	1	1	1	N	93798
Q32PB3 SACA4_BOVIN	Sperm acrosome membrane-associated protein 4	C	35	2	2	Y	12964
tr A4UAF1 A4UAF1_BOVIN	Sperm associated antigen 11 isoform D	C	22	3	2	Y	14818
tr A4UAF2 A4UAF2_BOVIN	Sperm associated antigen 11 isoform E	C	35	3	2	Y	9244
tr Q2PMM0 Q2PMM0_BOVIN	Sperm inner acrosomal membrane protein IAM38 (Fragment)	LF	21	5	5	Y	34158
tr Q4R0H2 Q4R0H2_BOVIN	Spermadhesin 2	C	78	44	12	Y	15221
P82292 Z13_BOVIN	Spermadhesin Z13	C	77	33	3	Y	13383
P29392 SPAD1_BOVIN	Spermadhesin-1	C	85	56	55	Y	15036
Q0VD19 ASM_BOVIN	Sphingomyelin phosphodiesterase	C	30	12	12	Y	69392
Q3ZCH0 GRP75_BOVIN	Stress-70 protein mitochondrial	HF	1	1	1	N	73742
tr F1MM32 F1MM32_BOVIN	Sulfhydryl oxidase	HF	63	34	33	Y	63006
tr A6QQA8 A6QQA8_BOVIN	Sulfhydryl oxidase	C	63	34	33	Y	62975
tr E1BFV8 E1BFV8_BOVIN	Sulfotransferase	HF	2	2	1	Y	64965
P00442 SODC_BOVIN	Superoxide dismutase [Cu-Zn]	C	47	5	1	Y	15683
tr F1MNQ4 F1MNQ4_BOVIN	Superoxide dismutase [Cu-Zn]	HF	60	5	1	Y	15687
A0JNN2 SFTA2_BOVIN	Surfactant-associated protein 2	C	13	1	1	Y	8223
tr Q2NL10 Q2NL10_BOVIN	Syntaxin binding protein 2	HF	7	2	2	Y	66384
Q3ZBT5 STX7_BOVIN	Syntaxin-7	HF	5	1	1	N	29656
tr A5D9B6 A5D9B6_BOVIN	Syntenin	HF	8	1	1	N	32415
tr A8PVV5 A8PVV5_BOVIN	SYPL1 protein	C	18	2	2	Y	19476
O97790 TBCD1_BOVIN	TBC1 domain family member 1	HF	1	2	1	N	132097
tr G5E531 G5E531_BOVIN	T-complex protein 1 subunit alpha	C	50	20	19	Y	60223
Q3ZBH0 TCPB_BOVIN	T-complex protein 1 subunit beta	C	50	19	19	Y	57475
Q2T9X2 TCPD_BOVIN	T-complex protein 1 subunit delta	C	27	10	9	Y	58207
tr F1N0E5 F1N0E5_BOVIN	T-complex protein 1 subunit delta	C	27	10	9	Y	58162
Q2NKZ1 TCPH_BOVIN	T-complex protein 1 subunit eta	C	50	20	19	Y	59443
tr F1MWR8 F1MWR8_BOVIN	T-complex protein 1 subunit eta (Fragment)	C	50	20	19	Y	59180
Q3T0K2 TCPG_BOVIN	T-complex protein 1 subunit gamma	C	58	23	21	Y	60586
Q3ZCI9 TCPQ_BOVIN	T-complex protein 1 subunit theta	C	44	21	21	Y	59610
Q3MHL7 TCPZ_BOVIN	T-complex protein 1 subunit zeta	C	40	15	8	Y	57956
Q3T084 TCPW_BOVIN	T-complex protein 1 subunit zeta-2	C	31	11	1	Y	58032
tr F1MP48 F1MP48_BOVIN	T-complex protein 1 subunit zeta-2	C	37	12	2	Y	57965

tr A5D7E6 A5D7E6_BOVIN	Tetraspanin	C	4	1	1	Y	30019
tr G8JKX6 G8JKX6_BOVIN	Tetraspanin (Fragment)	C	23	3	3	Y	22666
Q3T0S3 TSN1_BOVIN	Tetraspanin-1	C	3	1	1	N	26208
tr A6QPE3 A6QPE3_BOVIN	TEX101 protein	C	41	7	7	Y	27286
tr A6QQ20 A6QQ20_BOVIN	TGOLN2 protein (Fragment)	HF	8	1	1	N	33444
tr Q3SX33 Q3SX33_BOVIN	Thy-1 cell surface antigen	C	11	2	2	N	18012
	Thymus HYPOCHOLESTEROLEMIC factor (TPHF) (Superoxide dismutase) (SOD) (Fragments)	HF	63	5	1	Y	11344
tr Q9TS96 Q9TS96_BOVIN	Thyroglobulin	HF	0	1	1	Y	303221
P01267 THYG_BOVIN	Tissue alpha-L-fucosidase	C	36	9	9	Y	54089
Q2KIM0 FUCO_BOVIN	Tissue factor pathway inhibitor 2	C	69	29	27	Y	26675
Q7YRQ8 TFPI2_BOVIN	Toll-like receptor 9	HF	2	2	1	Y	115454
tr Q866B2 Q866B2_BOVIN	Toll-like receptor 9	HF	2	2	1	Y	115484
tr A5H631 A5H631_BOVIN	Transcobalamin II	C	43	10	1	Y	32235
tr Q58CU1 Q58CU1_BOVIN	Transcobalamin-2	C	54	21	11	Y	47958
Q9XSC9 TCO2_BOVIN	Transcription factor AEBP1	LF	5	3	3	Y	82366
tr O97567 O97567_BOVIN	Transforming protein RhoA	C	52	6	6	Y	21768
P61585 RHOA_BOVIN	Transitional endoplasmic reticulum ATPase	C	18	8	8	Y	89303
tr G3X757 G3X757_BOVIN	Transitional endoplasmic reticulum ATPase	C	18	8	8	Y	89330
Q3ZBT1 TERA_BOVIN	Transmembrane protease serine	HF	1	1	1	N	48397
tr E1BJ94 E1BJ94_BOVIN	Triokinase/FMN cyclase	C	25	9	9	N	59131
Q58DK4 TKFC_BOVIN	Triosephosphate isomerase	LF	5	1	1	N	26690
Q5E956 TPIS_BOVIN	Tripeptidyl-peptidase 1	C	51	15	15	Y	61352
Q0V8B6 TPP1_BOVIN	Tripeptidyl-peptidase 1	C	51	15	15	Y	61339
tr F1MK08 F1MK08_BOVIN	Tripeptidyl-peptidase 2	C	14	11	11	Y	138361
A5PK39 TPP2_BOVIN	Tripeptidyl-peptidase 2	C	14	11	11	Y	138345
tr F1N0M0 F1N0M0_BOVIN	TRMU protein	LF	1	1	1	N	95515
tr A3KN16 A3KN16_BOVIN	Tubulin alpha-3 chain	LF	32	8	8	Y	49926
Q32KN8 TBA3_BOVIN	Tubulin beta-2B chain	HF	31	9	1	Y	49953
Q6B856 TBB2B_BOVIN	Tubulin beta-4B chain	C	37	11	2	Y	49831
Q3MHM5 TBB4B_BOVIN	Tubulin beta-6 chain	HF	12	5	1	Y	49900
Q2HJ81 TBB6_BOVIN	Tubulin beta-6 chain (Fragment)	HF	16	5	1	Y	39683
tr G3X7R8 G3X7R8_BOVIN							

Q3T077 TPPP2_BOVIN	Tubulin polymerization-promoting protein family member 2	C	34	5	5	N	18564
tr Q0VD44 Q0VD44_BOVIN	Twisted gastrulation homolog 1 (Drosophila)	C	16	2	2	Y	24937
tr E1BND0 E1BND0_BOVIN	Ubiquitin carboxyl-terminal hydrolase	C	1	3	2	Y	294173
tr J7JXJ4 J7JXJ4_BOVIN	Ubiquitin carboxyl-terminal hydrolase (Fragment)	C	42	3	1	Y	16315
tr F1N1Z2 F1N1Z2_BOVIN	Ubiquitin carboxyl-terminal hydrolase (Fragment)	LF	0	1	1	Y	157582
P23356 UCHL1_BOVIN	Ubiquitin carboxyl-terminal hydrolase isozyme L1	HF	22	4	2	Y	28335
Q2TBG8 UCHL3_BOVIN	Ubiquitin carboxyl-terminal hydrolase isozyme L3	HF	13	2	2	N	26182
P62992 RS27A_BOVIN	Ubiquitin-40S ribosomal protein S27a	LF	29	5	5	Y	17965
P63048 RL40_BOVIN	Ubiquitin-60S ribosomal protein L40	C	53	7	7	Y	14728
Q1RMX2 UB2D2_BOVIN	Ubiquitin-conjugating enzyme E2 D2	HF	20	2	1	Y	16735
Q3ZCF7 UB2D3_BOVIN	Ubiquitin-conjugating enzyme E2 D3	HF	20	2	1	Y	16745
tr Q32LF7 Q32LF7_BOVIN	UDP-Gal:betaGlcNAc beta 1 4-galactosyltransferase polypeptide 4	C	51	18	16	Y	39461
tr F1MSC3 F1MSC3_BOVIN	Uncharacterized protein	C	6	10	8	Y	262684
tr E1B8A0 E1B8A0_BOVIN	Uncharacterized protein	C	16	4	4	Y	37787
tr E1B7S8 E1B7S8_BOVIN	Uncharacterized protein	C	15	4	4	Y	61273
tr E1BBU4 E1BBU4_BOVIN	Uncharacterized protein	C	1	1	1	N	93220
tr F1MZJ5 F1MZJ5_BOVIN	Uncharacterized protein	C	1	1	1	N	88174
tr F1MKM4 F1MKM4_BOVIN	Uncharacterized protein	C	5	2	2	N	75430
tr F1MJV6 F1MJV6_BOVIN	Uncharacterized protein	C	6	5	4	N	132531
tr F1N1C7 F1N1C7_BOVIN	Uncharacterized protein	C	6	4	4	Y	131962
tr E1B8K0 E1B8K0_BOVIN	Uncharacterized protein	C	0	1	1	N	156487
tr F1N2J8 F1N2J8_BOVIN	Uncharacterized protein	C	23	6	6	Y	39957
tr E1BH06 E1BH06_BOVIN	Uncharacterized protein	C	5	6	6	N	192764
tr F1N6C0 F1N6C0_BOVIN	Uncharacterized protein	C	36	2	2	N	16966
tr F1MWD3 F1MWD3_BOVIN	Uncharacterized protein	C	54	21	19	Y	59615
tr F1MPE1 F1MPE1_BOVIN	Uncharacterized protein	C	1	2	1	N	161717
tr E1BKX1 E1BKX1_BOVIN	Uncharacterized protein	C	4	3	3	Y	152767
tr F1MLR4 F1MLR4_BOVIN	Uncharacterized protein	C	33	7	7	Y	40688
tr E1BK29 E1BK29_BOVIN	Uncharacterized protein	C	1	1	1	N	108265
tr F1MX50 F1MX50_BOVIN	Uncharacterized protein	C	55	7	7	Y	23959
tr E1BC47 E1BC47_BOVIN	Uncharacterized protein	C	51	8	8	Y	28148
tr F6R3I5 F6R3I5_BOVIN	Uncharacterized protein	C	29	4	4	Y	27144

tr G3MYQ2 G3MYQ2_BOVIN	Uncharacterized protein	C	29	7	6	Y	19185
tr F1MLE1 F1MLE1_BOVIN	Uncharacterized protein	C	1	2	1	N	171480
tr F1MD73 F1MD73_BOVIN	Uncharacterized protein	C	2	2	2	Y	190098
tr F1N724 F1N724_BOVIN	Uncharacterized protein	C	1	3	2	Y	520807
tr F1MK55 F1MK55_BOVIN	Uncharacterized protein	C	0	2	1	N	508325
tr F1N5R7 F1N5R7_BOVIN	Uncharacterized protein	C	0	2	0	N	461310
tr F1MJJ0 F1MJJ0_BOVIN	Uncharacterized protein	C	0	1	1	Y	511306
tr F1N4K6 F1N4K6_BOVIN	Uncharacterized protein	C	1	2	1	N	205793
tr E1BJV0 E1BJV0_BOVIN	Uncharacterized protein	C	30	14	11	Y	61025
tr E1B9P4 E1B9P4_BOVIN	Uncharacterized protein	C	65	15	12	Y	26014
tr F1MU34 F1MU34_BOVIN	Uncharacterized protein	C	5	3	3	N	107063
tr F1N0I3 F1N0I3_BOVIN	Uncharacterized protein	C	2	3	1	Y	222214
tr G3X6D5 G3X6D5_BOVIN	Uncharacterized protein	C	1	1	1	N	120722
tr E1BQ21 E1BQ21_BOVIN	Uncharacterized protein	C	14	3	3	N	26042
tr G3N1D8 G3N1D8_BOVIN	Uncharacterized protein	C	30	5	5	Y	25428
tr E1BDN9 E1BDN9_BOVIN	Uncharacterized protein	C	31	5	5	Y	24903
tr G3N2D8 G3N2D8_BOVIN	Uncharacterized protein	C	4	2	2	N	60905
tr E1BDY3 E1BDY3_BOVIN	Uncharacterized protein	C	26	24	23	Y	134635
tr E1BI28 E1BI28_BOVIN	Uncharacterized protein	C	56	6	6	Y	20903
tr E1BB14 E1BB14_BOVIN	Uncharacterized protein	C	3	1	1	N	37254
tr E1BHY6 E1BHY6_BOVIN	Uncharacterized protein	C	17	3	3	Y	63081
tr E1BNY8 E1BNY8_BOVIN	Uncharacterized protein	C	0	1	1	Y	236171
tr F1MT25 F1MT25_BOVIN	Uncharacterized protein	C	1	2	1	Y	139586
tr E1B782 E1B782_BOVIN	Uncharacterized protein	C	0	4	1	N	528175
tr F1MWF0 F1MWF0_BOVIN	Uncharacterized protein	C	22	13	13	Y	116493
tr E1B748 E1B748_BOVIN	Uncharacterized protein	C	28	17	17	Y	111684
tr F1N2D5 F1N2D5_BOVIN	Uncharacterized protein	C	8	4	4	Y	61389
tr E1BDR2 E1BDR2_BOVIN	Uncharacterized protein	C	8	3	2	N	71516
tr F1MLW7 F1MLW7_BOVIN	Uncharacterized protein	C	43	8	8	Y	24397
tr E1BPQ9 E1BPQ9_BOVIN	Uncharacterized protein	C	10	2	2	Y	39739
tr F1MS23 F1MS23_BOVIN	Uncharacterized protein	C	52	6	6	Y	19711
tr E1B9Y3 E1B9Y3_BOVIN	Uncharacterized protein	C	20	2	2	Y	21707
tr F1MYX5 F1MYX5_BOVIN	Uncharacterized protein	C	16	5	5	Y	70112
tr E1BLI4 E1BLI4_BOVIN	Uncharacterized protein	C	39	8	8	Y	15416

tr M5FMV7 M5FMV7_BOVIN	Uncharacterized protein	C	19	6	6	Y	48013
tr G3X7F3 G3X7F3_BOVIN	Uncharacterized protein	C	27	15	1	Y	74145
tr E1BDF3 E1BDF3_BOVIN	Uncharacterized protein	C	47	20	20	Y	64357
tr E1BG25 E1BG25_BOVIN	Uncharacterized protein	C	34	15	14	Y	80694
tr E1BM47 E1BM47_BOVIN	Uncharacterized protein	C	14	15	13	Y	181029
tr G3X8E3 G3X8E3_BOVIN	Uncharacterized protein	C	54	6	6	Y	12534
tr F1MDF2 F1MDF2_BOVIN	Uncharacterized protein	C	55	6	6	Y	12293
tr F1MQI3 F1MQI3_BOVIN	Uncharacterized protein	C	0	3	1	N	801904
tr E1B9F2 E1B9F2_BOVIN	Uncharacterized protein	C	1	2	1	Y	210120
tr E1BP93 E1BP93_BOVIN	Uncharacterized protein	C	1	2	2	N	150932
tr E1BBK6 E1BBK6_BOVIN	Uncharacterized protein	C	33	17	17	Y	65042
tr F1MZU2 F1MZU2_BOVIN	Uncharacterized protein	C	14	5	4	Y	82992
tr E1B818 E1B818_BOVIN	Uncharacterized protein	C	13	6	6	N	73620
tr F1MU18 F1MU18_BOVIN	Uncharacterized protein	C	13	3	3	Y	37644
tr E1BM92 E1BM92_BOVIN	Uncharacterized protein	C	20	10	9	Y	91521
tr E1BLW6 E1BLW6_BOVIN	Uncharacterized protein	C	43	8	8	Y	36163
tr F1MUB9 F1MUB9_BOVIN	Uncharacterized protein	C	22	5	5	Y	36695
tr F1MHN4 F1MHN4_BOVIN	Uncharacterized protein	C	1	2	0	N	191981
tr F1MGN0 F1MGN0_BOVIN	Uncharacterized protein	C	23	11	10	Y	89038
tr F1N0F2 F1N0F2_BOVIN	Uncharacterized protein	C	14	5	5	N	59673
tr F1N2B5 F1N2B5_BOVIN	Uncharacterized protein	C	10	4	4	N	55479
tr E1BKZ9 E1BKZ9_BOVIN	Uncharacterized protein	C	3	2	2	N	91818
tr E1BL78 E1BL78_BOVIN	Uncharacterized protein	C	9	1	1	N	11458
tr F1MQL4 F1MQL4_BOVIN	Uncharacterized protein	C	23	4	4	Y	11433
tr F1MHF1 F1MHF1_BOVIN	Uncharacterized protein	C	38	14	14	Y	46274
tr E1BGM7 E1BGM7_BOVIN	Uncharacterized protein	C	1	2	2	Y	235348
tr F1N757 F1N757_BOVIN	Uncharacterized protein	C	0	16	12	Y	3813804
tr F2Z4K0 F2Z4K0_BOVIN	Uncharacterized protein	C	33	9	9	Y	49960
tr E1BHT5 E1BHT5_BOVIN	Uncharacterized protein	C	0	2	0	N	572608
tr F1MUP9 F1MUP9_BOVIN	Uncharacterized protein	C	9	3	3	N	42840
tr F1N3U5 F1N3U5_BOVIN	Uncharacterized protein	C	50	24	21	Y	52681
tr E1BGX2 E1BGX2_BOVIN	Uncharacterized protein	C	10	1	1	Y	10743
tr Q3T0Z0 Q3T0Z0_BOVIN	Uncharacterized protein	C	79	26	26	Y	12729
tr E1BNA9 E1BNA9_BOVIN	Uncharacterized protein	C	0	1	1	N	331148

tr F1MZ96 F1MZ96_BOVIN	Uncharacterized protein	C	20	3	3	N	26562
tr F1MH40 F1MH40_BOVIN	Uncharacterized protein	C	20	3	3	N	26334
tr E1BGB7 E1BGB7_BOVIN	Uncharacterized protein	C	24	8	7	Y	71723
tr F1MHK9 F1MHK9_BOVIN	Uncharacterized protein	C	2	3	3	Y	190767
tr E1BB65 E1BB65_BOVIN	Uncharacterized protein	C	16	2	2	Y	13305
tr E1BJW9 E1BJW9_BOVIN	Uncharacterized protein	C	8	7	7	N	131812
tr F1MIL6 F1MIL6_BOVIN	Uncharacterized protein	LF	14	3	3	Y	28981
tr G3MXM6 G3MXM6_BOVIN	Uncharacterized protein	LF	5	3	3	Y	82380
tr F1MCK2 F1MCK2_BOVIN	Uncharacterized protein	LF	0	1	1	N	586979
tr F1MYH5 F1MYH5_BOVIN	Uncharacterized protein	LF	3	2	2	Y	94002
tr E1BNR0 E1BNR0_BOVIN	Uncharacterized protein	LF	0	2	1	Y	515764
tr F1N7Q8 F1N7Q8_BOVIN	Uncharacterized protein	LF	0	1	1	N	226698
tr E1BCE1 E1BCE1_BOVIN	Uncharacterized protein	LF	0	1	1	N	208169
tr F1N353 F1N353_BOVIN	Uncharacterized protein	LF	3	1	1	Y	26141
tr F1N1F8 F1N1F8_BOVIN	Uncharacterized protein	LF	1	2	1	Y	353233
tr E1BBS9 E1BBS9_BOVIN	Uncharacterized protein	LF	1	2	1	Y	222998
tr E1BIN5 E1BIN5_BOVIN	Uncharacterized protein	LF	11	6	6	N	88959
tr F1MBN4 F1MBN4_BOVIN	Uncharacterized protein	LF	2	1	1	N	48095
tr E1BMG2 E1BMG2_BOVIN	Uncharacterized protein	LF	0	1	1	N	530231
tr F1N7A1 F1N7A1_BOVIN	Uncharacterized protein	LF	2	2	1	N	71038
tr F1N005 F1N005_BOVIN	Uncharacterized protein	LF	1	2	0	N	93356
tr G3MZZ8 G3MZZ8_BOVIN	Uncharacterized protein	LF	0	1	1	N	173493
tr E1B725 E1B725_BOVIN	Uncharacterized protein	LF	14	3	3	N	49795
tr G3N2K4 G3N2K4_BOVIN	Uncharacterized protein	LF	26	23	22	Y	121076
tr E1BBU2 E1BBU2_BOVIN	Uncharacterized protein	LF	1	1	1	N	140261
tr E1BF57 E1BF57_BOVIN	Uncharacterized protein	LF	1	2	1	N	99115
tr F1MYA6 F1MYA6_BOVIN	Uncharacterized protein	LF	8	1	1	N	17815
tr F1N3S7 F1N3S7_BOVIN	Uncharacterized protein	LF	2	1	1	N	98595
tr G3MZN3 G3MZN3_BOVIN	Uncharacterized protein	LF	4	1	1	N	36209
tr E1BKX0 E1BKX0_BOVIN	Uncharacterized protein	LF	1	1	1	N	80431
tr F1MW79 F1MW79_BOVIN	Uncharacterized protein	LF	9	1	1	Y	30881
tr G3MY90 G3MY90_BOVIN	Uncharacterized protein	LF	34	2	2	Y	6927
tr G3MZU3 G3MZU3_BOVIN	Uncharacterized protein	LF	4	1	1	N	21190
tr E1BLX5 E1BLX5_BOVIN	Uncharacterized protein	LF	3	1	1	Y	37899

tr F6PZ29 F6PZ29_BOVIN	Uncharacterized protein	LF	12	1	1	N	16328
tr E1BKX3 E1BKX3_BOVIN	Uncharacterized protein	LF	1	2	1	N	152037
tr E1BCU2 E1BCU2_BOVIN	Uncharacterized protein	LF	1	2	0	N	162778
tr E1BJU4 E1BJU4_BOVIN	Uncharacterized protein	LF	1	1	1	N	73764
tr E1BIG2 E1BIG2_BOVIN	Uncharacterized protein	LF	2	2	0	N	69748
tr F1N6B6 F1N6B6_BOVIN	Uncharacterized protein	LF	0	1	1	N	196272
tr G3MXC4 G3MXC4_BOVIN	Uncharacterized protein	LF	3	3	1	Y	86942
tr E1BFM2 E1BFM2_BOVIN	Uncharacterized protein	LF	3	1	1	Y	47274
tr E1BC58 E1BC58_BOVIN	Uncharacterized protein	LF	12	2	2	N	24167
tr E1BHV1 E1BHV1_BOVIN	Uncharacterized protein	LF	0	1	0	N	553749
tr E1BE29 E1BE29_BOVIN	Uncharacterized protein	LF	0	1	0	N	563805
tr E1BAS6 E1BAS6_BOVIN	Uncharacterized protein	LF	0	1	1	Y	301194
tr F1MLJ7 F1MLJ7_BOVIN	Uncharacterized protein	LF	0	1	1	N	169944
tr F1MHW2 F1MHW2_BOVIN	Uncharacterized protein	LF	1	1	1	N	96954
tr E1BPF2 E1BPF2_BOVIN	Uncharacterized protein	LF	0	1	1	N	209018
tr E1BL02 E1BL02_BOVIN	Uncharacterized protein	LF	1	3	0	N	141638
tr G3MZQ5 G3MZQ5_BOVIN	Uncharacterized protein	LF	1	1	1	N	65851
tr E1BIW0 E1BIW0_BOVIN	Uncharacterized protein	LF	1	2	1	Y	199465
tr G3MX66 G3MX66_BOVIN	Uncharacterized protein	LF	28	3	3	Y	21366
tr E1BB22 E1BB22_BOVIN	Uncharacterized protein	LF	0	1	1	Y	150625
tr Q2TBG4 Q2TBG4_BOVIN	Uncharacterized protein	LF	5	1	1	N	31207
tr E1BJP1 E1BJP1_BOVIN	Uncharacterized protein	LF	4	1	1	N	20655
tr F1MIB3 F1MIB3_BOVIN	Uncharacterized protein	LF	0	1	1	N	283429
tr E1BG18 E1BG18_BOVIN	Uncharacterized protein	LF	0	1	1	N	166364
tr F1MDR1 F1MDR1_BOVIN	Uncharacterized protein	LF	0	1	1	N	168829
tr F1N369 F1N369_BOVIN	Uncharacterized protein	LF	19	5	5	Y	36864
tr F1MLW8 F1MLW8_BOVIN	Uncharacterized protein	LF	11	3	1	Y	24624
tr F1MYN4 F1MYN4_BOVIN	Uncharacterized protein	HF	1	2	1	Y	176514
tr E1BPL3 E1BPL3_BOVIN	Uncharacterized protein	HF	2	2	0	N	83085
tr F2Z4F0 F2Z4F0_BOVIN	Uncharacterized protein	HF	15	4	4	N	42614
tr E1BK03 E1BK03_BOVIN	Uncharacterized protein	HF	1	2	1	N	125208
tr E1BMU6 E1BMU6_BOVIN	Uncharacterized protein	HF	1	1	1	N	89606
tr E1BM36 E1BM36_BOVIN	Uncharacterized protein	HF	1	1	1	N	88594
tr G3MZJ0 G3MZJ0_BOVIN	Uncharacterized protein	HF	0	2	0	N	269382

tr E1B719 E1B719_BOVIN	Uncharacterized protein	HF	0	2	0	N	277171
tr F1MI56 F1MI56_BOVIN	Uncharacterized protein	HF	0	2	0	N	275013
tr E1B7G6 E1B7G6_BOVIN	Uncharacterized protein	HF	1	3	1	N	156126
tr E1BNA3 E1BNA3_BOVIN	Uncharacterized protein	HF	1	2	1	N	127969
tr E1BP14 E1BP14_BOVIN	Uncharacterized protein	HF	1	2	2	Y	220695
tr F1MKU0 F1MKU0_BOVIN	Uncharacterized protein	HF	0	1	1	N	176556
tr E1BKQ8 E1BKQ8_BOVIN	Uncharacterized protein	HF	0	1	1	N	169690
tr E1BJV2 E1BJV2_BOVIN	Uncharacterized protein	HF	2	2	1	N	101297
tr G3MWL0 G3MWL0_BOVIN	Uncharacterized protein	HF	2	2	1	N	104380
tr G3N157 G3N157_BOVIN	Uncharacterized protein	HF	2	3	0	N	138370
tr E1BNE2 E1BNE2_BOVIN	Uncharacterized protein	HF	2	3	0	N	134571
tr E1BI42 E1BI42_BOVIN	Uncharacterized protein	HF	2	2	2	Y	127199
tr E1BI97 E1BI97_BOVIN	Uncharacterized protein	HF	1	3	2	Y	265693
tr E1BFE5 E1BFE5_BOVIN	Uncharacterized protein	HF	2	2	2	Y	87741
tr F1N5K1 F1N5K1_BOVIN	Uncharacterized protein	HF	2	2	1	N	89902
tr F1MXP9 F1MXP9_BOVIN	Uncharacterized protein	HF	0	2	0	N	369266
tr E1BAK5 E1BAK5_BOVIN	Uncharacterized protein	HF	1	1	1	Y	105797
tr F1ME99 F1ME99_BOVIN	Uncharacterized protein	HF	2	3	1	N	133544
tr G5E5V6 G5E5V6_BOVIN	Uncharacterized protein	HF	1	2	1	N	147931
tr E1BJH3 E1BJH3_BOVIN	Uncharacterized protein	HF	1	2	2	Y	269607
tr F1N2L7 F1N2L7_BOVIN	Uncharacterized protein	HF	11	2	2	Y	27117
tr F1MRN5 F1MRN5_BOVIN	Uncharacterized protein	HF	1	2	1	N	332733
tr E1BJE1 E1BJE1_BOVIN	Uncharacterized protein	HF	1	2	1	Y	210074
tr E1B9R5 E1B9R5_BOVIN	Uncharacterized protein	HF	0	2	1	Y	541373
tr E1BAK4 E1BAK4_BOVIN	Uncharacterized protein	HF	0	1	0	N	255551
tr F2Z4F5 F2Z4F5_BOVIN	Uncharacterized protein	HF	3	1	1	N	82032
tr E1BG89 E1BG89_BOVIN	Uncharacterized protein	HF	3	1	1	N	26175
tr F1N062 F1N062_BOVIN	Uncharacterized protein	HF	1	1	1	Y	121466
tr E1BKH6 E1BKH6_BOVIN	Uncharacterized protein	HF	1	1	1	N	55007
tr F1N6H6 F1N6H6_BOVIN	Uncharacterized protein	HF	1	2	1	N	109407
tr E1BF15 E1BF15_BOVIN	Uncharacterized protein	HF	1	1	1	Y	92868
tr E1BK68 E1BK68_BOVIN	Uncharacterized protein	HF	1	1	1	N	93698
tr F1N6Y1 F1N6Y1_BOVIN	Uncharacterized protein	HF	8	6	6	N	109472
tr E1B7E3 E1B7E3_BOVIN	Uncharacterized protein	HF	1	2	2	Y	259182

tr E1B9D3 E1B9D3_BOVIN	Uncharacterized protein	HF	1	2	1	Y	255399
tr F1MDU9 F1MDU9_BOVIN	Uncharacterized protein	HF	1	3	2	N	242247
tr F1MME7 F1MME7_BOVIN	Uncharacterized protein	HF	1	1	1	N	94482
tr E1BLD1 E1BLD1_BOVIN	Uncharacterized protein	HF	0	2	0	N	289337
tr F1MNS0 F1MNS0_BOVIN	Uncharacterized protein	HF	0	2	0	N	531585
tr E1BE11 E1BE11_BOVIN	Uncharacterized protein	HF	0	3	1	N	607353
tr E1B8E7 E1B8E7_BOVIN	Uncharacterized protein	HF	0	1	1	Y	345034
tr E1BNY9 E1BNY9_BOVIN	Uncharacterized protein	HF	0	2	0	N	482196
tr E1BBJ7 E1BBJ7_BOVIN	Uncharacterized protein	HF	1	2	1	N	138998
tr E1B944 E1B944_BOVIN	Uncharacterized protein	HF	2	2	1	N	120638
tr F1N685 F1N685_BOVIN	Uncharacterized protein	HF	1	2	1	N	283587
tr F1MLD6 F1MLD6_BOVIN	Uncharacterized protein	HF	1	1	1	Y	56294
tr F1MKB0 F1MKB0_BOVIN	Uncharacterized protein	HF	1	1	1	Y	56717
tr E1B7K3 E1B7K3_BOVIN	Uncharacterized protein	HF	1	1	1	Y	63741
tr F1MYV2 F1MYV2_BOVIN	Uncharacterized protein	HF	0	1	1	N	174976
tr F1MBZ1 F1MBZ1_BOVIN	Uncharacterized protein	HF	4	2	2	N	68916
tr G3N205 G3N205_BOVIN	Uncharacterized protein	HF	1	2	0	N	165709
tr E1BNZ0 E1BNZ0_BOVIN	Uncharacterized protein	HF	1	2	0	N	162896
tr M0QVY0 M0QVY0_BOVIN	Uncharacterized protein	HF	2	1	1	N	60804
tr F1MUY2 F1MUY2_BOVIN	Uncharacterized protein	HF	2	1	1	N	60856
tr F1MEG3 F1MEG3_BOVIN	Uncharacterized protein	HF	0	2	0	N	331081
tr G3MXJ5 G3MXJ5_BOVIN	Uncharacterized protein	HF	2	1	1	Y	44553
tr F1MIA9 F1MIA9_BOVIN	Uncharacterized protein	HF	25	4	4	Y	19716
tr F1MI18 F1MI18_BOVIN	Uncharacterized protein	HF	0	1	0	N	165758
tr F1MMS7 F1MMS7_BOVIN	Uncharacterized protein	HF	10	3	1	Y	43986
tr E1BI82 E1BI82_BOVIN	Uncharacterized protein	HF	61	32	4	Y	69149
tr E1BN28 E1BN28_BOVIN	Uncharacterized protein	HF	1	3	1	Y	150417
tr V6F7T8 V6F7T8_BOVIN	Uncharacterized protein	HF	2	2	0	N	64531
tr G5E5D5 G5E5D5_BOVIN	Uncharacterized protein	HF	0	2	1	Y	771059
tr F6PRJ0 F6PRJ0_BOVIN	Uncharacterized protein	HF	1	2	0	Y	90217
tr F1MHR8 F1MHR8_BOVIN	Uncharacterized protein	HF	5	4	4	Y	106937
tr F1MUK2 F1MUK2_BOVIN	Uncharacterized protein	HF	1	2	0	N	110415
tr F1N1D8 F1N1D8_BOVIN	Uncharacterized protein	HF	3	1	1	Y	55205
tr E1BPL8 E1BPL8_BOVIN	Uncharacterized protein	HF	4	2	2	N	85899

tr F1MM57 F1MM57_BOVIN	Uncharacterized protein	HF	1	2	2	Y	232362
tr F1MG13 F1MG13_BOVIN	Uncharacterized protein	HF	0	1	1	N	390074
tr E1BKQ6 E1BKQ6_BOVIN	Uncharacterized protein	HF	0	1	1	N	232838
tr E1BKW7 E1BKW7_BOVIN	Uncharacterized protein	HF	2	2	2	Y	304077
tr E1BF23 E1BF23_BOVIN	Uncharacterized protein	HF	1	1	1	N	165262
tr F1MGM4 F1MGM4_BOVIN	Uncharacterized protein	HF	1	2	1	N	267182
tr F1MT60 F1MT60_BOVIN	Uncharacterized protein	HF	0	3	1	N	567743
tr F1MKW9 F1MKW9_BOVIN	Uncharacterized protein	HF	1	1	1	N	105350
tr G3MXN4 G3MXN4_BOVIN	Uncharacterized protein	HF	1	1	1	N	126454
tr E1BFN9 E1BFN9_BOVIN	Uncharacterized protein	HF	0	1	1	Y	184471
tr F1N184 F1N184_BOVIN	Uncharacterized protein	HF	2	2	0	N	59371
tr G3N1P3 G3N1P3_BOVIN	Uncharacterized protein	HF	3	1	1	Y	62618
tr F1N415 F1N415_BOVIN	Uncharacterized protein	HF	0	3	1	N	547165
tr E1BF59 E1BF59_BOVIN	Uncharacterized protein	HF	1	3	1	Y	527646
tr F1MBV2 F1MBV2_BOVIN	Uncharacterized protein	HF	9	2	2	Y	35658
tr E1BAF6 E1BAF6_BOVIN	Uncharacterized protein	HF	1	2	1	N	229153
tr E1BNJ9 E1BNJ9_BOVIN	Uncharacterized protein	HF	18	3	3	Y	34079
tr F1MWE0 F1MWE0_BOVIN	Uncharacterized protein	HF	3	1	1	N	51055
tr E1BH45 E1BH45_BOVIN	Uncharacterized protein	HF	1	2	1	N	181758
tr E1BHN4 E1BHN4_BOVIN	Uncharacterized protein	HF	0	4	0	N	374199
tr F1MMR9 F1MMR9_BOVIN	Uncharacterized protein	HF	1	2	0	N	208257
tr F1MPT4 F1MPT4_BOVIN	Uncharacterized protein	HF	0	1	1	N	241466
tr E1BBB5 E1BBB5_BOVIN	Uncharacterized protein	HF	1	2	1	Y	157116
tr F1MWN4 F1MWN4_BOVIN	Uncharacterized protein	HF	1	2	1	N	148483
tr F1MXV4 F1MXV4_BOVIN	Uncharacterized protein	HF	1	2	1	N	200277
tr E1BET1 E1BET1_BOVIN	Uncharacterized protein	HF	1	2	1	Y	189610
tr G3MZA6 G3MZA6_BOVIN	Uncharacterized protein	HF	1	2	0	N	103901
tr E1BLT3 E1BLT3_BOVIN	Uncharacterized protein	HF	1	4	0	N	288890
tr F1MHC2 F1MHC2_BOVIN	Uncharacterized protein	HF	7	2	2	Y	66356
tr G3MZF5 G3MZF5_BOVIN	Uncharacterized protein	HF	2	2	0	N	73863
tr E1BKM6 E1BKM6_BOVIN	Uncharacterized protein	HF	1	2	1	N	118749
tr G5E661 G5E661_BOVIN	Uncharacterized protein	HF	0	2	0	N	304802
tr G5E5W9 G5E5W9_BOVIN	Uncharacterized protein	HF	0	2	0	N	286103
tr G3N0H1 G3N0H1_BOVIN	Uncharacterized protein	HF	1	1	1	N	174158

tr F1MQI1 F1MQI1_BOVIN	Uncharacterized protein	HF	1	2	1	N	271479
tr E1BP50 E1BP50_BOVIN	Uncharacterized protein	HF	1	1	1	N	170961
tr E1BLK1 E1BLK1_BOVIN	Uncharacterized protein	HF	0	2	2	N	305194
tr E1BJC6 E1BJC6_BOVIN	Uncharacterized protein	HF	2	2	2	N	61398
tr F1ME38 F1ME38_BOVIN	Uncharacterized protein	HF	3	2	2	N	118792
tr E1BK25 E1BK25_BOVIN	Uncharacterized protein	HF	0	1	1	N	164782
tr E1BL04 E1BL04_BOVIN	Uncharacterized protein	HF	1	2	2	Y	428734
tr E1BE98 E1BE98_BOVIN	Uncharacterized protein	HF	4	2	2	Y	123142
tr F1MRS4 F1MRS4_BOVIN	Uncharacterized protein	HF	2	2	1	N	78635
tr E1BG37 E1BG37_BOVIN	Uncharacterized protein	HF	2	2	1	N	105415
tr E1BB98 E1BB98_BOVIN	Uncharacterized protein	HF	2	2	1	N	46497
tr E1BKY2 E1BKY2_BOVIN	Uncharacterized protein	HF	16	2	2	Y	13235
tr G5E5W7 G5E5W7_BOVIN	Uncharacterized protein	HF	2	2	2	N	96902
tr F1ME41 F1ME41_BOVIN	Uncharacterized protein	HF	12	1	1	Y	10440
tr G3MX54 G3MX54_BOVIN	Uncharacterized protein	HF	12	1	1	Y	10378
tr F1MU57 F1MU57_BOVIN	Uncharacterized protein	HF	19	13	1	Y	88830
tr E1B7A3 E1B7A3_BOVIN	Uncharacterized protein	HF	12	1	1	Y	10348
tr F1MM07 F1MM07_BOVIN	Uncharacterized protein	HF	1	2	1	N	222641
tr F1MTP1 F1MTP1_BOVIN	Uncharacterized protein	HF	0	1	0	N	188038
tr F1MS52 F1MS52_BOVIN	Uncharacterized protein (Fragment)	C	0	1	1	N	126589
tr F1MEW1 F1MEW1_BOVIN	Uncharacterized protein (Fragment)	C	2	2	0	N	85072
tr G3N3E8 G3N3E8_BOVIN	Uncharacterized protein (Fragment)	C	1	1	1	Y	220525
tr G3X834 G3X834_BOVIN	Uncharacterized protein (Fragment)	LF	1	1	1	Y	104189
tr G3X6U1 G3X6U1_BOVIN	Uncharacterized protein (Fragment)	HF	3	1	1	N	55098
tr F1MQ87 F1MQ87_BOVIN	Uncharacterized protein (Fragment)	HF	3	1	1	Y	141516
tr F1MYZ3 F1MYZ3_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	2	Y	526510
tr F1N5D7 F1N5D7_BOVIN	Uncharacterized protein (Fragment)	HF	1	1	1	N	129939
tr E1BNF6 E1BNF6_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	1	N	401667
tr E1BK38 E1BK38_BOVIN	Uncharacterized protein (Fragment)	C	0	2	1	N	567920
tr F1MGY9 F1MGY9_BOVIN	Uncharacterized protein (Fragment)	C	37	10	10	Y	37107
tr F1MY16 F1MY16_BOVIN	Uncharacterized protein (Fragment)	C	1	2	2	Y	256001
tr F1MXF5 F1MXF5_BOVIN	Uncharacterized protein (Fragment)	C	0	2	1	Y	442146
tr F1MNJ4 F1MNJ4_BOVIN	Uncharacterized protein (Fragment)	C	18	7	7	Y	55901
tr E1BLB4 E1BLB4_BOVIN	Uncharacterized protein (Fragment)	C	0	2	1	N	501324

tr F1MGQ1 F1MGQ1_BOVIN	Uncharacterized protein (Fragment)	C	64	29	29	Y	35108
tr F1N1K6 F1N1K6_BOVIN	Uncharacterized protein (Fragment)	C	1	4	1	Y	530684
tr F1N5W4 F1N5W4_BOVIN	Uncharacterized protein (Fragment)	C	18	3	3	Y	41752
tr F1N3E9 F1N3E9_BOVIN	Uncharacterized protein (Fragment)	C	22	10	8	N	64127
tr F1MPF3 F1MPF3_BOVIN	Uncharacterized protein (Fragment)	C	11	19	19	Y	347588
tr F1MTZ4 F1MTZ4_BOVIN	Uncharacterized protein (Fragment)	C	0	1	1	Y	403272
tr G3X6I0 G3X6I0_BOVIN	Uncharacterized protein (Fragment)	C	9	9	9	Y	202985
tr F1MYQ7 F1MYQ7_BOVIN	Uncharacterized protein (Fragment)	C	1	3	1	Y	338694
tr F1N5H2 F1N5H2_BOVIN	Uncharacterized protein (Fragment)	C	9	3	3	N	53678
tr F1MZ40 F1MZ40_BOVIN	Uncharacterized protein (Fragment)	C	13	5	5	Y	74692
tr F1MUX6 F1MUX6_BOVIN	Uncharacterized protein (Fragment)	C	38	6	5	Y	25067
tr G3MX12 G3MX12_BOVIN	Uncharacterized protein (Fragment)	C	0	4	1	N	518272
tr F1ML49 F1ML49_BOVIN	Uncharacterized protein (Fragment)	C	4	4	2	N	115899
tr G3MWX7 G3MWX7_BOVIN	Uncharacterized protein (Fragment)	C	66	17	16	Y	11903
tr G3MX67 G3MX67_BOVIN	Uncharacterized protein (Fragment)	C	12	4	4	N	36536
tr F1N6H1 F1N6H1_BOVIN	Uncharacterized protein (Fragment)	C	0	2	1	Y	517637
tr F1N6H4 F1N6H4_BOVIN	Uncharacterized protein (Fragment)	C	0	3	1	Y	824687
tr F1MGK8 F1MGK8_BOVIN	Uncharacterized protein (Fragment)	C	4	3	3	Y	110281
tr G3MXX5 G3MXX5_BOVIN	Uncharacterized protein (Fragment)	C	23	9	9	Y	50285
tr F1N4J2 F1N4J2_BOVIN	Uncharacterized protein (Fragment)	C	0	1	0	N	518418
tr F1MMM6 F1MMM6_BOVIN	Uncharacterized protein (Fragment)	C	16	12	12	Y	147331
tr F1N4N6 F1N4N6_BOVIN	Uncharacterized protein (Fragment)	C	1	1	1	N	120617
tr E1BJV1 E1BJV1_BOVIN	Uncharacterized protein (Fragment)	C	0	1	1	Y	414894
tr F1MF78 F1MF78_BOVIN	Uncharacterized protein (Fragment)	C	0	3	1	Y	789349
tr G3N0V0 G3N0V0_BOVIN	Uncharacterized protein (Fragment)	C	71	15	15	Y	35952
tr F6RP72 F6RP72_BOVIN	Uncharacterized protein (Fragment)	C	33	9	9	Y	49828
tr E1BDR1 E1BDR1_BOVIN	Uncharacterized protein (Fragment)	C	27	2	2	Y	21194
tr G3N3C5 G3N3C5_BOVIN	Uncharacterized protein (Fragment)	C	8	5	5	Y	134188
tr F1MY12 F1MY12_BOVIN	Uncharacterized protein (Fragment)	C	35	5	4	Y	24484
tr F1MC52 F1MC52_BOVIN	Uncharacterized protein (Fragment)	C	15	2	2	Y	13457
tr F1MPT2 F1MPT2_BOVIN	Uncharacterized protein (Fragment)	C	9	7	0	Y	112139
tr F1N2X6 F1N2X6_BOVIN	Uncharacterized protein (Fragment)	C	10	5	5	Y	104842
tr F1MIM0 F1MIM0_BOVIN	Uncharacterized protein (Fragment)	C	16	2	2	Y	13059
tr F1N6G4 F1N6G4_BOVIN	Uncharacterized protein (Fragment)	LF	9	2	2	N	41937

tr G5E5C6 G5E5C6_BOVIN	Uncharacterized protein (Fragment)	LF	24	5	1	Y	39701
tr F1MY02 F1MY02_BOVIN	Uncharacterized protein (Fragment)	LF	2	1	1	Y	89961
tr F1MUM9 F1MUM9_BOVIN	Uncharacterized protein (Fragment)	LF	1	1	1	Y	130506
tr E1BDG9 E1BDG9_BOVIN	Uncharacterized protein (Fragment)	LF	1	1	1	N	100240
tr F1MX68 F1MX68_BOVIN	Uncharacterized protein (Fragment)	LF	5	2	2	N	54462
tr F1N6Y7 F1N6Y7_BOVIN	Uncharacterized protein (Fragment)	LF	1	2	1	N	138278
tr G5E513 G5E513_BOVIN	Uncharacterized protein (Fragment)	LF	10	2	1	Y	49970
tr G5E5T5 G5E5T5_BOVIN	Uncharacterized protein (Fragment)	LF	6	2	1	N	42478
tr F1N191 F1N191_BOVIN	Uncharacterized protein (Fragment)	LF	14	5	5	N	65367
tr F1N157 F1N157_BOVIN	Uncharacterized protein (Fragment)	LF	1	2	1	Y	131193
tr G5E6C5 G5E6C5_BOVIN	Uncharacterized protein (Fragment)	LF	2	1	1	Y	68937
tr F1MF64 F1MF64_BOVIN	Uncharacterized protein (Fragment)	LF	1	2	1	Y	314665
tr F1MDK3 F1MDK3_BOVIN	Uncharacterized protein (Fragment)	LF	1	2	1	N	135323
tr G5E562 G5E562_BOVIN	Uncharacterized protein (Fragment)	LF	2	1	1	N	37891
tr F1ML06 F1ML06_BOVIN	Uncharacterized protein (Fragment)	LF	1	2	1	Y	119525
tr F1N0J5 F1N0J5_BOVIN	Uncharacterized protein (Fragment)	LF	1	1	1	Y	133637
tr G3N0A8 G3N0A8_BOVIN	Uncharacterized protein (Fragment)	LF	0	1	1	Y	445001
tr F1MSL9 F1MSL9_BOVIN	Uncharacterized protein (Fragment)	LF	3	2	1	Y	174794
tr F1MJN7 F1MJN7_BOVIN	Uncharacterized protein (Fragment)	LF	1	2	2	Y	227614
tr F1MJN1 F1MJN1_BOVIN	Uncharacterized protein (Fragment)	LF	1	2	2	Y	242067
tr G5E604 G5E604_BOVIN	Uncharacterized protein (Fragment)	LF	27	2	1	Y	11058
tr G5E622 G5E622_BOVIN	Uncharacterized protein (Fragment)	LF	2	1	1	Y	83054
tr G3X800 G3X800_BOVIN	Uncharacterized protein (Fragment)	LF	2	1	1	Y	69265
tr G3X8C8 G3X8C8_BOVIN	Uncharacterized protein (Fragment)	LF	4	1	1	N	25182
tr G3N0G9 G3N0G9_BOVIN	Uncharacterized protein (Fragment)	LF	7	1	1	Y	13626
tr F1MVK1 F1MVK1_BOVIN	Uncharacterized protein (Fragment)	LF	2	3	3	N	173973
tr F1MSZ5 F1MSZ5_BOVIN	Uncharacterized protein (Fragment)	HF	2	1	1	Y	87012
tr F1MRA8 F1MRA8_BOVIN	Uncharacterized protein (Fragment)	HF	8	3	3	Y	62927
tr F1MD79 F1MD79_BOVIN	Uncharacterized protein (Fragment)	HF	0	1	0	N	130053
tr F1MLY7 F1MLY7_BOVIN	Uncharacterized protein (Fragment)	HF	1	3	2	Y	299727
tr G3MXX3 G3MXX3_BOVIN	Uncharacterized protein (Fragment)	HF	1	1	1	N	208923
tr F1N544 F1N544_BOVIN	Uncharacterized protein (Fragment)	HF	1	2	1	N	226523
tr F1N3F6 F1N3F6_BOVIN	Uncharacterized protein (Fragment)	HF	1	2	1	N	220106
tr F1N734 F1N734_BOVIN	Uncharacterized protein (Fragment)	HF	1	2	2	Y	304704

tr F1MS24 F1MS24_BOVIN	Uncharacterized protein (Fragment)	HF	1	1	1	N	69174
tr G3N309 G3N309_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	1	Y	529407
tr E1B7E2 E1B7E2_BOVIN	Uncharacterized protein (Fragment)	HF	1	2	1	N	221312
tr F1MX04 F1MX04_BOVIN	Uncharacterized protein (Fragment)	HF	0	1	0	N	178592
tr F1MC84 F1MC84_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	1	N	503287
tr F1N740 F1N740_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	0	N	442421
tr E1BED7 E1BED7_BOVIN	Uncharacterized protein (Fragment)	HF	0	3	0	N	576043
tr E1BAI2 E1BAI2_BOVIN	Uncharacterized protein (Fragment)	HF	0	1	1	N	115672
tr G5E5T3 G5E5T3_BOVIN	Uncharacterized protein (Fragment)	HF	1	1	1	N	121682
tr G3MW10 G3MW10_BOVIN	Uncharacterized protein (Fragment)	HF	1	1	1	N	126823
tr G3MZG0 G3MZG0_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	0	N	391140
tr F1MKJ3 F1MKJ3_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	0	N	392941
tr E1B805 E1B805_BOVIN	Uncharacterized protein (Fragment)	HF	1	2	1	Y	187266
tr F1MY32 F1MY32_BOVIN	Uncharacterized protein (Fragment)	HF	8	1	1	N	16898
tr F1N506 F1N506_BOVIN	Uncharacterized protein (Fragment)	HF	2	2	1	N	100655
tr F1MLR9 F1MLR9_BOVIN	Uncharacterized protein (Fragment)	HF	0	1	1	N	247870
tr F1MBK4 F1MBK4_BOVIN	Uncharacterized protein (Fragment)	HF	2	2	0	N	60412
tr F1N1S8 F1N1S8_BOVIN	Uncharacterized protein (Fragment)	HF	2	2	0	N	72696
tr F1MJ07 F1MJ07_BOVIN	Uncharacterized protein (Fragment)	HF	2	2	2	N	171184
tr E1BP38 E1BP38_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	0	N	235101
tr F1MHA5 F1MHA5_BOVIN	Uncharacterized protein (Fragment)	HF	1	2	1	Y	555967
tr F1MIL7 F1MIL7_BOVIN	Uncharacterized protein (Fragment)	HF	3	1	1	N	29539
tr F1MBL6 F1MBL6_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	0	N	407888
tr F1MRK2 F1MRK2_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	1	N	402590
tr F1MGT1 F1MGT1_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	0	N	1005129
tr F1N6T6 F1N6T6_BOVIN	Uncharacterized protein (Fragment)	HF	2	1	1	Y	149981
tr F1MDH3 F1MDH3_BOVIN	Uncharacterized protein (Fragment)	HF	0	2	0	N	270813
tr F1MBJ7 F1MBJ7_BOVIN	Uncharacterized protein (Fragment)	HF	2	3	0	N	116096
tr F1N6I9 F1N6I9_BOVIN	Uncharacterized protein (Fragment)	HF	0	1	1	Y	219726
tr E1BE64 E1BE64_BOVIN	Uncharacterized protein (Fragment)	HF	2	3	1	Y	103705
tr G5E6J5 G5E6J5_BOVIN	Uncharacterized protein (Fragment)	HF	3	2	1	N	49922
tr F1ML28 F1ML28_BOVIN	Uncharacterized protein (Fragment)	HF	3	2	2	Y	74213
tr F1MJU4 F1MJU4_BOVIN	Uncharacterized protein (Fragment)	HF	1	1	1	Y	140767
tr G3MXG6 G3MXG6_BOVIN	Uncharacterized protein (Fragment)	HF	19	1	1	Y	14759

tr E1BFN5 E1BFN5_BOVIN	Uncharacterized protein (Fragment)2	HF	35	22	2	Y	78385
P10568 MYO1A_BOVIN	Unconventional myosin-Ia	HF	1	1	1	Y	118869
Q07130 UGPA_BOVIN	UTP--glucose-1-phosphate uridylyltransferase	C	26	9	9	N	56903
tr Q2KJ80 Q2KJ80_BOVIN	Vacuolar protein sorting 33 homolog A (S. cerevisiae)	LF	1	1	1	N	67508
tr A5D9D1 A5D9D1_BOVIN	Vanin 2	C	50	24	21	Y	52621
P63026 VAMP2_BOVIN	Vesicle-associated membrane protein 2	LF	21	1	1	N	12649
tr F1MDK1 F1MDK1_BOVIN	Vesicle-associated membrane protein 2 (Fragment)	LF	21	1	1	N	12517
Q2KJD2 VAMP3_BOVIN	Vesicle-associated membrane protein 3	C	39	5	5	N	11535
tr G3X752 G3X752_BOVIN	Vesicle-associated membrane protein 3 (Fragment)	C	40	5	5	N	11404
P81401 VIP_BOVIN	VIP peptides	C	77	18	18	Y	19165
tr I7CT57 I7CT57_BOVIN	Vitamin D binding protein	LF	6	2	2	N	53328
tr F1N5M2 F1N5M2_BOVIN	Vitamin D-binding protein	LF	6	2	2	N	53356
Q3MHN5 VTDB_BOVIN	Vitamin D-binding protein	LF	6	2	2	N	53342
P07224 PROS_BOVIN	Vitamin K-dependent protein S	LF	3	2	2	Y	75133
P31404 VATA_BOVIN	V-type proton ATPase catalytic subunit A	C	21	8	8	Y	68344
P31408 VATB2_BOVIN	V-type proton ATPase subunit B brain isoform	HF	31	9	9	Y	56577
Q32LB7 VATE2_BOVIN	V-type proton ATPase subunit E 2	C	12	3	3	N	26171
P40682 VAS1_BOVIN	V-type proton ATPase subunit S1	C	22	6	6	Y	51781
tr Q0VD14 Q0VD14_BOVIN	WDR45-like	HF	2	1	1	N	38094
Q9GLM3 RPGR1_BOVIN	X-linked retinitis pigmentosa GTPase regulator-interacting protein 1	HF	1	2	1	N	138433
O97764 QOR_BOVIN	Zeta-crystallin	C	24	5	5	Y	35383
tr A7E3P5 A7E3P5_BOVIN	Zinc binding alcohol dehydrogenase domain containing 1	C	28	4	4	Y	32091
Q3ZCH5 ZA2G_BOVIN	Zinc-alpha-2-glycoprotein	C	61	23	23	Y	33852
tr Q32KZ7 Q32KZ7_BOVIN	Zona pellucida binding protein	LF	19	5	5	Y	36956