

Multivalent Hydrazide-Functionalized Magnetic Nanoparticles for Glycopeptide Enrichment and Identification

Qichen Cao,^{a,b} Cheng Ma,^c Haihong Bai,^d Xianyu Li,^c Hui Yan,^c Yan Zhao,^c Wantao Ying^{*ac} and Xiaohong Qian ^{*ac}

^a School of Pharmacy, Pharmaceutical University, Shenyang, 110016, China. Tel: 86 024 23986093; E-mail: sy_idan@126.com

^b The Affiliated Hospital of Liaoning University of Traditional Chinese Medicine, Shenyang 110032, China. Fax: 86 024 31961991; Tel: 86 024 31961990

^c State Key Laboratory of Proteomics, Beijing Proteome Research Center, Beijing Institute of Radiation Medicine, Beijing 102206, China. Tel: 86 010 80705155; E-mail: qianxh1@163.com

^d School of Life Science and Technology, Beijing Institute of Technology, Beijing, 100081, China. E-mail: 13811703047@163.com

Electronic Supplementary Information

Table S1 List of glycopeptides from mouse liver tissue sample isolated by the pGMA-H nanoparticles.

Table S1

Sequence	Uniprot Accession No	Glycosite	Protein Name	Annotatio n state in database
PAVIAASTTSPAN#NTSSTVSPAQKVMVAPLSGSVTPGT K	A2A653	111	Protein Bptf	Novel
EVEEN#DCQDLVSVHIYITQLAEKFDLR	A2AQ99	1408	Protein Duox2	Novel
EHGPVGLVHVGHAHTN#TTDKPR	A2AS89	195	Agmatinase, mitochondrial	Novel
EDGDYSPN#GSAQP GDK	A2ATU0	317	Probable 2-oxoglutarate dehydrogenase E1 component DHKTD1, mitochondrial	Novel
SSAN#QSEFQQIQK	A6H584	326	Collagen alpha-5	Novel
N#MSTVLLK	B2RT14	114	MCG14318, isoform CRA_h	Novel
LQVTLYN#CSFGR	B2RXS4	761	Plexin-B2	Novel
TEAGVFEYVADPTFEN#FTGGVK		1103		
MSFGRTSISP SLTRHDL SIGSLTVSSPTN#TSPWSK	B7ZCC9-2	1898	Probable G-protein coupled receptor 112	Novel
VLN#LTDNTYFK	B8JK39	226	Protein Itga9	Novel
AFYN#GTWYR	B9EHN5	56	Protein Slc2a9	Novel
ALN#GSALYTGS SLDFVR	D3YWD1	518	Protein Col6a3	Novel
DGTSQPAICPQN#VTMNM EGLK	E9PV38	100	Protein Ces2g	Novel
LN#LT EEEK		476		Novel
HGGQTETRN#TTDTSVTV DGLDPGFLYKCSVWVEK	E9Q0N2	382	Protein Ptp rh	Novel
GFFDPNTEEN#LTYLQLK	E9Q557	2435	Desmoplakin	Novel
NSCN#QCNEPR PEDSR	F6QC I0	179	Protein Taf15	Novel
N#VTYGTYLDDPDPDDGFNYK	G3UYI3	57	Calumenin	Novel
TQN#GSLPAVTR	G3X9D6	25	Apolipoprotein N, isoform CRA_a	Novel
GVTNDLLSVQNGTGPSWIN#K	G5E897	302	KDEL	Novel
N#FTSSPPGQTQFK		56		Novel
EN#VTCQDPIIGIDPGK	G5E8Q8	665	MCG115189	Novel
SSGNNAGDPGTEEEYDHSN#GTAESHSPDESDFDSEA KLMR	J3QP10	70	Uncharacterized protein	Novel
EGN#CSAQSG LAWQDCDFK	O08677-2	82	Kininogen-1	Novel
DGSDEPGTAACPN#GSFHCTNTGYK	O08795-2	72	Glucosidase 2 subunit beta	Novel
TREN#ECHFYAGGQVYPGEASR	O08807	52	Peroxi redoxin-4	Novel
LNQASFHTPPN#VSVCDVNWEK	O09117-2	77	Synaptophysin-like protein 1	Novel
VGVNKN#QTVTATFGYPFR		54		Novel
AN#LTWTVK	O09159	367	Lysosomal alpha-mannosidase	Potential
ELN#ISICPV SQTSER		497		Potential
ANIQFGEN#GTTISAVTNK		105		Reference
N#QSVGDPNVDLIR		122		Potential
NMVLQN#GTK	O35114	45	Lysosome membrane protein 2	Novel
TMVFPVMYLN#ESVLIDK		412		Potential
TSLDWWTDTDCNMIN#GTDGDSFHPLISK		249		Potential
STEPCAHLLVSSIGVVGTA EQN#R	O35215	74	D-dopachrome decarboxylase	Novel
IGLLGYN#ATTENVDR	O35423-2	367	Serine--pyruvate aminotransferase, mitochondrial	Novel
TAGAN#GTSGFFCVDEGGLPLAQR	O35453-2	111	Serine protease hepsin	Novel
SPNIQGEFYISDDTPHQSYDDL N#YTL SK	O35469	269	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 6	Novel
ACN#ATNWIEYMFNK	O35604	185	Niemann-Pick C1 protein	Potential
LIASN#ITETMR		1063		Novel
N#ATYGYVLDDPDPDDGFNYK	O35887	131	Calumenin	Novel
AKN#NTVTPGGKPNK	O55142	55	60S ribosomal protein L35a	Novel
HLEN#NSHFGSHR	O70133-2	675	ATP-dependent RNA helicase A	Novel
LSSSPN#VTISCK	O70362	496	Phosphatidylinositol-glycan-specific phospholipase D	Reference

TN#QSCELVIDSTEK	O70570	170	Polymeric immunoglobulin receptor	Potential
LLLTAAPN#LTTSPAFR		547		Novel
SVYN#CSGEACSGHNR	O88325	501	Alpha-N-acetylglucosaminidase	Novel
SYIYSGSHDGHINYWDSETGEN#DSFSGK	O88342	356	WD repeat-containing protein 1	Novel
N#YSIFLADINQER	O88531	197	Palmitoyl-protein thioesterase 1	Novel
VN#KTEEDYAR	O88668	160	Protein CREG1	Novel
TWN#QSIALR	O88783	2168	Coagulation factor V	Novel
AFMN#SSFTIDPK	O88792	185	Junctional adhesion molecule A	Reference
SHTN#TSHVMQYGN#K	O89017	265,274	Legumain	Potential
DVGSGTTN#NSQACAQFLEQYFHNSDLTEFMR		221		Reference
SSSHLPPSSYFN#ASGR	O89023	442	Tripeptidyl-peptidase 1	Potential
KSEEMLNIVN#NSK	P00186	220	Cytochrome P450 1A2	Novel
HPESN#FCSR	P00329	110	Alcohol dehydrogenase 1	Novel
ALN#VTLSSMGR		1324		Reference
FSDGLESN#R	P01029	224	Complement C4-B	Novel
N#TTCQDLQIEVK		1387		Potential
EN#ISDPTSPLR	P01592	70	Immunoglobulin J chain	Novel
VLTLAN#FTTK	P01831	94	Thy-1 membrane glycoprotein	Reference
NLLGYYN#QSAGGSHTLQQMSGCDLGSDWR	P01899	110	H-2 class I histocompatibility antigen, D-B alpha chain	Novel
TLLGYYN#QSK	P01901	107	H-2 class I histocompatibility antigen, K-B alpha chain	Novel
RIPAIN#R		1393		Reference
TAN#ETSAEAYNLLLR	P02468	1203	Laminin subunit gamma-1	Reference
EAQYN#STFR	P03987-2	179	Ig gamma-3 chain C region	Novel
AFVEN#ITVLENSLVFK	P04939	66	Major urinary protein 3	Novel
HFIEQGIN#VCLCQSYAK	P05202	270	Aspartate aminotransferase, mitochondrial	Novel
AVCMLSN#TTAIAEAWAR	P05213	380	Tubulin alpha-1B chain	Novel
AFN#ECCTIANK	P06684	733	Complement C5	Novel
AEFAVAN#DTGFVDIPQQEK	P06797	221	Cathepsin L1	Novel
VYN#GSVPFEER	P06802-2	323	Ectonucleotide pyrophosphatase/phosphodiesterase family member 1	Reference
		1051		Novel
DN#SCVDPPHPVN#ATIVTR	P06909	1061	Complement factor H	Reference
IQCVDGN#WTTLPVCIEER		676		Novel
GDTHTQILEGLQFN#LTQTSEADIIHK	P07758	101	Alpha-1-antitrypsin 1-1	Reference
NLINDYVSN#QTQGMIK		185		Reference
YTGN#ASALLILPDQGR	P07759	270	Serine protease inhibitor A3K	Reference
AN#HSHSGDYICK		173		Potential
ATVN#DSGEYR	P08101-2	92	Low affinity immunoglobulin gamma Fc region receptor II	Potential
YHHYSSN#FSIPK		166		Potential
EEEAQLDGLN#ASQIR		62		Novel
HNN#DTQHIWESDSNEFSVIADPR	P08113	217	Endoplasmic	Reference
HVGDLGN#VTAGKDGVAN#VSIEDR	P08228	87,97	Superoxide dismutase	Novel
LACLN#GTVLR		275		Reference
LVGSPFIGCTVVN#K	P08607	227	C4b-binding protein	Potential
KDTCAQECSHFN#LTK		669		Reference
NPCTSEQN#CTSPFSYK	P09055	212	Integrin beta-1	Potential
HHAAYVNNLN#ATEEK	P09671	63	Superoxide dismutase , mitochondrial	Novel
DQCIVDDITYNVN#DTFHK		528		Reference
HEEGHMLN#CTCFGQGR	P11276	542	Fibronectin	Potential
N#YTDCTSEGR		430		Novel
LDAPTNLQFVN#ETDR		1006		Reference
AFNISP#DTSSGSGINLVTLK	P11438	252	Lysosome-associated membrane glycoprotein 1	Reference

DATIQAYLSSGN#FSK		177		Reference
EN#VSDPSLTITFGR		78		Potential
GYLLTLN#FTK		97		Reference
N#VTVVLRL		159		Reference
WSN#DSATISFTKPWSQ GK	P11609	60	Antigen-presenting glycoprotein CD1d1	Reference
TEKDPQNNDPVGTCYLSTEN#FTR	P11688	185	Integrin alpha-5	Reference
LN#FTGPGEPDSLRL	P11835	51	Integrin beta-2	Novel
IAN#ETGGHGS GPR		627		Potential
YGIVVIDECPGVGIVLPQSFGN#ESLR	P12265	416	Beta-glucuronidase	Potential
GDHGAN#FSCR		179		Novel
LDETDLCLGN#WTWQEGSQ QTLK	P13597-2	403	Intercellular adhesion molecule 1	Novel
LDWLG N#CSGLNDDSYGYR		158		Novel
PKPPKN#ESLETYPLMMK	P14094	193	Sodium/potassium-transporting ATPase subunit beta-1	Reference
NVIWGN#HSSTQYPDVNHAK	P14152	186	Malate dehydrogenase, cytoplasmic	Novel
N#WTINR		651		Potential
SN#ISILR	P15116	692	Cadherin-2	Potential
ECLGN#CSEPDDPTK		242		Potential
ELGLYNLMN#ITR	P15208	138	Insulin receptor	Potential
HN#LTITQ GK		445		Reference
EALGN#ASQLFDSWLK		754		Potential
GWL N#GSLVG FYK	P16406	189	Glutamyl aminopeptidase	Potential
KNNHHEEN#ISSK	P16546-2	1926	Spectrin alpha chain, non-erythrocytic 1	Novel
LDPPCTN#TTAPSNYLN NPVVR		327		Reference
MYVTN#DTEVAENNYEALK	P16675	140	Lysosomal protective protein	Novel
CNSVLTYN#LTPVVQK		156		Novel
EASHYSIH DIVLSYN#TSDSTVFPGAVAK		115		Potential
N#LSFW DAPLGSSYMCNK	P17047-2	322	Lysosome-associated membrane glycoprotein 2	Potential
LN#NSQIK		280		Potential
VPFIFININPATTN#FTGSCQPQSAQLR		265		Potential
DLGPALAN#SSH DVK	P17439	289	Glucosylceramidase	Reference
DELHHSGWN#TCSSCFGDSTK	P17563	78	Selenium-binding protein 1	Novel
HTGPGILSMANAGPNTN#GSQFFICTAK	P17742	108	Peptidyl-prolyl cis-trans isomerase A	Novel
YYHGELSYLN#VTR	P18242	261	Cathepsin D	Reference
TQLTCSLN#SSGVDIVGHR		44		Novel
TSDTGEEEAITN#STEANGK	P18572-2	154	Basigin	Novel
QADVADQQTTTELPAENGETEN#QSPASEEEK	P18608	82	Non-histone chromosomal protein HMG-14	Novel
QGIQVLVSTSN#VSSLEGAR	P19096	1938	Fatty acid synthase	Novel
WGATFPHPVN#YSPSTHPNEGLEENYCR	P20918	136	Plasminogen	Novel
N#ATSYP PMCSQDAGWAK	P23953	79	Carboxylesterase 1C	Novel
FNSANEDN#VTQVR	P24270	439	Catalase	Novel
DTN#GSQFFITTVK	P24369	148	Peptidyl-prolyl cis-trans isomerase B	Novel
AN#NTTYGLAAGLFTK	P24549	422	Retinal dehydrogenase 1	Novel
YEQLQN#ETR	P24638	167	Lysosomal acid phosphatase	Potential
EASN#HSSGAGLVQIN#K		84		Reference
	P24668	95	Cation-dependent mannose-6-phosphate receptor	Potential
EELQAN#GSAPAADKEEPASGSAATPAAAEK	P26645	61	Myristoylated alanine-rich C-kinase substrate	Novel
GTTN#TTSAGVPCQR	P26928	305	Hepatocyte growth factor-like protein	Potential
DSVIN#LSESVEDGPR	P27046	78	Alpha-mannosidase 2	Novel
LKELN#GTAPEEKK	P27612	559	Phospholipase A-2-activating protein	Novel
LLQVVYLHSNN#ITK	P28653	312	Biglycan	Potential
ISDTN#ITAIPQGLPTSLTEVHLDGNK	P28654	206	Decorin	Potential

N#ASFVYTK		1142		Reference
SLDEEAIKEN#NSIHWK	P28665	1180	Murinoglobulin-1	Potential
YLN#ETQQLTQK		993		Reference
EVNSKLDNN#GCSTQEVN#ITELQSK	P28666	286	Murinoglobulin-2	Novel
		294		Potential
N#YTTDLLTK	P28798	263	Granulins	Potential
IPN#NTQWITWSPEGHK		144		Novel
IQN#YSVMAICDYDK	P28843	315	Dipeptidyl peptidase 4	Reference
KLDFIVLN#ETR		514		Reference
SAEGTFFIN#K	P29416	157	Beta-hexosaminidase subunit alpha	Potential
N#ISEGFSGIPDNVDAAFALPAHR	P29788	241	Vitronectin	Reference
N#NTNTGVQPENTSPPGDLNPR		86		Novel
FQN#FSMATDQR	P30204-2	147	Macrophage scavenger receptor types I and II	Potential
VLNN#ITNDLR		253		Potential
RN#WTETEV	P31428	332	Dipeptidase 1	Reference
RPPQDGSSAQN#CSSSPAK	P31651	595	Sodium- and chloride-dependent betaine transporter	Novel
FVPNSNMN#FTGQAYSGR		89		Reference
GN#TTAIDKEIAR		71		Novel
N#DTGPPYVCETR	P31809-2	210	Carcinoembryonic antigen-related cell adhesion molecule 1	Potential
MTLSQN#NSILR		375		Reference
NPVSVN#R		226		Potential
TLTLLN#VTR		206		Reference
KKPTPIQLNPAPDGSAVN#GTSSAETNLEALQK	P31938	21	Dual specificity mitogen-activated protein kinase kinase 1	Novel
HSVN#NTYSQFQDEYSLEEV	P32020	194	Non-specific lipid-transfer protein	Novel
LGACN#DTLK		129		Novel
SLTFN#ESYQDVSEVVYGA	P32261	188	Antithrombin-III	Reference
VTINNWWAN#K		225		Potential
VEDEGN#YTCEFATFPN#GTR	P32507-2	128	Poliovirus receptor-related protein 2	Novel
		138		Reference
EILVHPN#YTR	P33587	290	Vitamin K-dependent protein C	Potential
QN#FSN#LTVSTEDQVK	P34927	75	Asialoglycoprotein receptor 1	Novel
		78		Potential
VVN#STTGPEHLR	P35441	1067	Thrombospondin-1	Reference
HGEVCPAGWKPGSDTIKPDVN#K	P35700	189	Peroxioredoxin-1	Novel
GAVVGIDLGTN#SCVAVMEGK	P38647	64	Stress-70 protein, mitochondrial	Novel
DGQQN#ISLLYTEPGASQTQTGASFR	P39061-1	338	Collagen alpha-1	Novel
EDSSGMHHEN#QTYPPYSPQAQPQAIHR	P39447	892	Tight junction protein ZO-1	Novel
GAMITHQNIIN#DCSGFIK	P41216	296	Long-chain-fatty-acid--CoA ligase 1	Novel
YPTPGEAPGVVGNFN#K	P41233	98	ATP-binding cassette sub-family A member 1	Potential
IEGLTN#ETYR	P42703-2	385	Leukemia inhibitory factor receptor	Reference
VLVAPPSEAN#TTK	P43006-2	202	Excitatory amino acid transporter 2	Novel
TKFPFWGDGN#HTLFHNPHVNPLPTGYEDE	P43024	92	Cytochrome c oxidase subunit 6A1, mitochondrial	Novel
TPEKN#DTAAAGQGER	P43406	869	Integrin alpha-V	Reference
N#LTQQLQTTCQTVLVNAQGLPQNIQDQAK	P43883	314	Perilipin-2	Novel
TILVDN#NTWN#NTHISR	P46978	544	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase	Potential
		548	subunit STT3A	Reference
QSN#GSIIVISLAGK	P50172	162	Corticosteroid 11-beta-dehydrogenase isozyme 1	Novel
WHN#GSAVWK	P50427	465	Steryl-sulfatase	Potential
ICDFSN#ASKPQTIQESTGGIVEVLHK	P51660	281		Novel
ILMTSSASGIYGNFGQAN#YSAAK		163	Peroxisomal multifunctional enzyme type 2	Novel
N#STPSEPDSGQGPPEEEEEEEEEAAKEEAQGV	P51859	198	Hepatoma-derived growth factor	Novel

KLHINYNN#LTESVGPLPK	P51885	127	Lumican	Potential
HAN#WTLTPLK		253		Novel
ITVVYAEN#GTVLQGTTVASVYK	P52430	324	Serum paraoxonase/arylesterase 1	Potential
LN#FSHGSHEYHAESIANIR		118		Novel
TVWVDYHN#ITQVVAVGGR	P53657	206	Pyruvate kinase isozymes R/L	Novel
KPNN#LSDTVK	P54751	109	CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,3-sialyltransferase 1	Potential
AADAHVDAHYYEQNEQPTGTCAACITGGN#R	P55264-2	131	Adenosine kinase	Novel
VIDLWDLAQSAN#FTEK	P55302	271	Alpha-2-macroglobulin receptor-associated protein	Novel
VVN#VSELYGTPCTK	P55772	291	Ectonucleoside triphosphate diphosphohydrolase 1	Potential
N#STFGSVEVFSLDPNK		223		Potential
LVTQTIPCN#K	P56528	124	ADP-ribosyl cyclase 1	Potential
HDSEQDNSDN#NTIFVQGLGEN#VTIESVADYFK	P56959	277,288	RNA-binding protein FUS	Novel
AN#NSWFQSIK	P57716	529	Nicastrin	Potential
SNTGGQAFQPCVFDHWQILPGDPFDN#SSRPSQVVAETR	P58252	827	Elongation factor 2	Novel
SENN#SSNSDIVHVEK	P59017	298	Bcl-2-like protein 13	Novel
DN#LTLWTSDDQDDGGEGNN	P61982	229	14-3-3 protein gamma	Novel
IIDVVYN#ASNNELV		84		Novel
LDVGN#FSWGSECCTR	P62242	64	40S ribosomal protein S8	Novel
N#QTAEKEEFHQK		584		Novel
TVTNAVTVPAYFN#DSQR	P63017	151	Heat shock cognate 71 kDa protein	Novel
ETTYDVLGVKPN#ATQEELK	P63037	16	DnaJ homolog subfamily A member 1	Novel
LVQDVAN#NTNEEAGDGTTTATVLAR	P63038	103	60 kDa heat shock protein, mitochondrial	Novel
KLGEMWN#NTAADDKQPYEK	P63158	134	High mobility group protein B1	Novel
SSTEN#TSAELHVLGR	P70194	209	C-type lectin domain family 4 member F	Potential
YVWLVEEQQLSCDEPILSN#K	P70296	140	Phosphatidylethanolamine-binding protein 1	Novel
LAVTN#TTMTGTVLK	P70302	171	Stromal interaction molecule 1	Potential
TLN#WSAAEPGAWATK	P70387	166	Hereditary hemochromatosis protein homolog	Potential
LILSN#KTAR	P70403	614	Protein CASP	Novel
RKMSGGSTMSSGGGNTN#NSNSK	P70662-2	279	LIM domain-binding protein 1	Novel
N#LTFQGPLPK		330		Novel
N#SSDYGFPEIR	P70665-2	259	Sialate O-acetyltransferase	Novel
GVFITN#ETGQPLIGK		470		Reference
LEN#LSSTESGYTATLTR	P70699	140	Lysosomal alpha-glucosidase	Novel
QVVEN#MTR		390		Potential
TYADYESVN#ECMEGVCK	P84089	26	Enhancer of rudimentary homolog	Novel
VWLDPN#ETNEIANANSR	P84099	27	60S ribosomal protein L19	Novel
DTYVN#ASQSLYGSSPR	P97290	243	Plasma protease C1 inhibitor	Reference
EEN#ATIATYPEFGVLDLK		197		Reference
N#LTSCPDGAPFIQHGPDYR	P97370	124	Sodium/potassium-transporting ATPase subunit beta-3	Novel
FTCN#QTTDVIIHSK		114		Reference
N#ATLVNEADK		817		Reference
KLN#YTLK	P97449	128	Aminoamidase N	Reference
NPNN#NTIHPNLR		784		Reference
SGQEDHYWLDVEKN#QSAK		606		Reference
KPVHPNDHVN#K	P97807-2	139	Fumarate hydratase, mitochondrial	Novel
SDIN#CSVMEATEEK	P97821	53	Dipeptidyl peptidase 1	Potential
N#SSYAHGGLDSNGKPADAVYGQK	P97855	37	Ras GTPase-activating protein-binding protein 1	Novel
GSN#FTAICVLK	Q00560	43	Interleukin-6 receptor subunit beta	Novel
DCVSCQN#VSR		528		Potential
DTLSIN#ATNIK	Q01279	352	Epidermal growth factor receptor	Reference
TCPAGIMGEN#NTLVWK		603		Potential

DYRPSAGN#NSLYQDTVVK	Q01339	162	Beta-2-glycoprotein 1	Reference
N#QTLVQDNVK	Q02013	42	Aquaporin-1	Novel
GTFTDCALAN#MTQQIR		155		Novel
N#MTLFSDLVAEK	Q02788	800	Collagen alpha-2	Potential
DN#DSLITR	Q03311	370	Cholinesterase	Potential
N#ITAQICIDK	Q04857	801	Collagen alpha-1	Potential
ALVN#FTR		89	Basement membrane-specific heparan sulfate proteoglycan core protein	Reference
SLTQGSGLIVGNLAPVN#GTSQGK	Q05793	3098		Reference
LDN#ASAFQGAVISPHYDSLKV	Q05920	409	Pyruvate carboxylase, mitochondrial	Novel
QELN#DSLQVAER	Q06890	327	Clusterin	Reference
DAGVGFPPEYQEDN#STYNFR	Q07113	740	Cation-independent mannose-6-phosphate receptor	Reference
EDSCQLN#YSEGPCGLMQR	Q07456	233	Protein AMBP [Cleaved into: Alpha-1-microglobulin; Inter-alpha-trypsin inhibitor light chain]	Potential
APIPTALDTN#SSK		543		Potential
GLN#LTEDTYKPR	Q07797	398	Galectin-3-binding protein	Potential
TYEN#GSSVEYR	Q07968	546	Coagulation factor XIII B chain	Reference
EETVLSQYQN#FSK	Q08481-2	360	Platelet endothelial cell adhesion molecule	Reference
VISN#NCTSYGVLIDIGK	Q08857	321	Platelet glycoprotein 4	Potential
GSEVEDEDLELFN#TSVQLRPPSTAPGPETAAFIER	Q3TAS6-2	182	ER membrane protein complex subunit 10	Novel
SDLNPAN#GSYPFQALHQR		520		Reference
LEDGFHPDAVAWAN#LTNAIR	Q3TCN2	93	Putative phospholipase B-like 2	Novel
AMSSN#ETAAYK		638	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit STT3B	Reference
TTLVDNNTWN#NSHIALVGK	Q3TDQ1	624		Novel
FGEFGN#YSLLVQHASSGANK	Q3UDW8-2	125	Heparan-alpha-glucosaminide N-acetyltransferase	Novel
AHSN#HTDIISFR	Q3UEG6	185	Alanine--glyoxylate aminotransferase 2, mitochondrial	Novel
EN#SSYQVINWR	Q3UP75	70	UDP-glucuronosyltransferase 3A1	Novel
SHSDN#GTDAFK	Q3UTJ2-2	256	Sorbin and SH3 domain-containing protein 2	Novel
WSYVAYN#ESDK	Q3UUQ7	363	GPI inositol-deacylase	Novel
DEKPIQAEAQASPGAPIN#QSGHQDTTGPSTDAQR	Q3UZ39-3	268	Leucine-rich repeat flightless-interacting protein 1	Novel
ANQIVIPHN#TTFTQTEPTK		418		Potential
DSCSNQN#ITCR		882		Potential
EN#MTFGSTLVTNPK		112		Potential
GELQSEN#SSLTLSSSNR	Q3V3R4	1113	Integrin alpha-1	Potential
VYVYAVN#QTR		531		Potential
YN#HTGQVVIYK		459		Potential
HLLN#ATASVSEAR		154		Novel
LGGWN#ITGPWAK	Q4PZA2-2	198	Endothelin-converting enzyme 1	Novel
STSENKEEDMLSGTEADAGCGLSDPN#LTLSSGK	Q505F5	533	Leucine-rich repeat-containing protein 47	Novel
VLQVVN#VTK	Q5PT54	73	Sodium/bile acid cotransporter 5	Novel
HAAEIAN#MSLDILSSVGTFKMR	Q5SDA5	955	Retinal guanylyl cyclase 2	Novel
N#LSMKARPEVNVK	Q60675	2474	Laminin subunit alpha-2	Potential
EALNQAVN#TTR		2395		Reference
LN#ASIADLQSK	Q61001	2211	Laminin subunit alpha-5	Reference
ESGIQN#VSTCR		330		Potential
FTAPDTLFAN#GSVYPPNEGFCPCR	Q61009	310	Scavenger receptor class B member 1	Potential
LTYN#ESR		288		Potential
FN#VSLIYGR		116		Reference
WGEVDLIGN#CSQFYPDR	Q61129	514	Complement factor I	Reference
EYEGAVYPDND#TTDFQR	Q61147	138	Ceruloplasmin	Novel
DN#ATQEEILHYLEK		80		Novel
N#STKEEILAALEK	Q61207	459	Sulfated glycoprotein 1	Potential

TN#SSFIQGFVDHVK		214		Potential
EIAN#ATTKPEDR		285		Reference
SCIN#ESAIDSR	Q61391	145	Neprilysin	Novel
FAAEHTIFASN#TSSLQITNIANATTR	Q61425	147	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	Novel
IN#CSDGYIEDYICQGNEEK	Q61469-2	143	Lipid phosphate phosphohydrolase 1	Novel
DSYPDGN#ITWYR		167		Reference
IIISPEEN#VTLTCTAENQLER	Q61490	480	CD166 antigen	Potential
TVNSLN#VSAISPEHDEADDISDENR		499		Reference
TGEIN#ITSIVDR	Q61495	110	Desmoglein-1-alpha	Novel
NLN#VTSLGFR		437		Potential
YQTVDSSNIDGFVN#CTK	Q61526	353	Receptor tyrosine-protein kinase erbB-3	Potential
LN#LTTPDK	Q61543	161	Golgi apparatus protein 1	Novel
RGPN#YTSGYGTNSELSNPSETESER	Q61584-2	394	Fragile X mental retardation syndrome-related protein 1	Novel
N#ASQCQLDDEEIEVQK	Q61606	118	Glucagon receptor	Potential
CVVHYEN#STVPEK		256		Reference
N#LTSPVGVPILNEHTFCAGLTK		264		Potential
NLFLN#HSETASAK	Q61646	148	Haptoglobin	Novel
VVLHPN#HSVVDIGLIK		182		Reference
KSPSIQGGFYIYISDNTPHQSYDDLN#YTLISK	Q61694	269	3 beta-hydroxysteroid dehydrogenase type 5	Novel
DAMVGN#YTCEVTELSR	Q61735-2	109	Leukocyte surface antigen CD47	Potential
TSYCN#ESFYFLCK	Q61830	1204	Macrophage mannose receptor 1	Potential
IN#VSYTGER		1385		Reference
PLN#ETFPVVYIETPK		157		Reference
SLGEVN#FTATAEALQSPELCGNK	Q61838	881	Alpha-2-macroglobulin	Reference
VN#LSFPSAQSLPASDTHLK		568		Reference
VSTLYANN#GSVLQGSTVASVYHK	Q62087	323	Serum paraoxonase/lactonase 3	Potential
N#CSSITLQN#ITR	Q62165	639,647	Dystroglycan	Potential
PFKCN#ICGNRFSTK	Q62255-2	458	Sal-like protein 3	Novel
VAGN#ETSEAEENDAAETEEAEEDR	Q62264	87	Thyroid hormone-inducible hepatic protein	Novel
SLN#CTVK	Q62452	69	UDP-glucuronosyltransferase 1-9	Novel
DLAVGDDYTN#R	Q62470-2	86	Integrin alpha-3	Novel
CN#VSNTHTSHCLASGEVMVNTLGDQLQGNGK	Q63836	132	Selenium-binding protein 2	Novel
KNVN#ISYTVN#DSFFPQR	Q63880	311		Novel
		317	Carboxylesterase 3A	Potential
EN#VTATLVELGR	Q63886	89	UDP-glucuronosyltransferase 1-1	Novel
VN#ITVLPSLTSR	Q63961	135	Endoglin	Potential
VSHYIIN#SSGPRPPVPPSPAQPPPGVSPSR	Q64010-2	63	Adapter molecule crk	Novel
N#TTSAAVMVHCLR	Q64176	276	Carboxylesterase 1E	Potential
FCALNWEN#QSVFVLAMVDEDDK	Q64374	84	Regucalcin	Novel
GEN#LSLVVHGPDIR	Q64442	9	Sorbitol dehydrogenase	Novel
KVEVEAVN#ATAVK	Q64487-1	715	Receptor-type tyrosine-protein phosphatase delta	Novel
	0			
KQEEFDIANN#GSSQANK	Q64514-2	161	Tripeptidyl-peptidase 2	Novel
PEVMPQEPGLPHHSEQSKN#R	Q64702-3	534	Serine/threonine-protein kinase PLK4	Novel
YLN#YSR	Q64726	190	Zinc-alpha-2-glycoprotein	Reference
IN#YTCNQGYR	Q64735-2	127	Complement component receptor 1-like protein	Novel
VGYSQSN#ISCFFR	Q69ZQ1	510	Uncharacterized family 31 glucosidase KIAA1161	Novel
LN#LSEGEVAATVK	Q6DYE8	594	Ectonucleotide pyrophosphatase/phosphodiesterase family member 3	Reference
GVNQQEEDTN#GCLKQN#DTYINGILYSPVQNTNEED		648		Novel
MYGFLK	Q6GQT1	654	Alpha-2-macroglobulin-P	Potential
LEN#ITTGTYYIHAQK	Q6GQT9	361	Nodal modulator 1	Novel

WELLQQVN#TSTR	Q6IFZ6	206	Keratin, type II cytoskeletal 1b	Novel
EEEYYAEPGVTEAEPVATEDAN#STD SLK		149		Novel
IFIFN#QTGIEAK	Q6P6J9	277	Thioredoxin domain-containing protein 15	Reference
N#VTGLEN#FTLK		165,171		Novel
AALQEN#ECLLASSTFAQAEVK	Q6PB66	497	Leucine-rich PPR motif-containing protein, mitochondrial	Novel
IYN#ASELPVR	Q6PD26	370	GPI transamidase component PIG-S	Reference
N#SSFAQYQSFK	Q71KU9	184	Fibrinogen-like protein 1	Novel
YGKN#DSLTLTQLK	Q75N73-2	52	Zinc transporter ZIP14	Novel
VVDKGN#GSKPTSPEEVK	Q80X19-2	138	Collagen alpha-1	Potential
STSAPQMSPGSSDN#QSSSPQPAQQK	Q80X50-2	504	Ubiquitin-associated protein 2-like	Novel
DQSEQETSDADQHVTSN#ASDSESSYR	Q811D0-2	674	Disks large homolog 1	Novel
GPGIKPN#QTSK		354		Potential
TPMTN#SSIR	Q8BFR4	271	N-acetylglucosamine-6-sulfatase	Potential
YPHNHVVN#NTLEGN#CSSK		103		Novel
		109		Potential
FVGIN#ASDINYSAGR	Q8BGC4	75	Zinc-binding alcohol dehydrogenase domain-containing protein 2	Novel
FSGAN#D TDFR	Q8BGQ4-2	583	Protein O-mannosyl-transferase 2	Novel
N#LSWQQEQDVAAVVGK	Q8BI84-2	631	Melanoma inhibitory activity protein 3	Potential
LECELESDPKGGN#ESDDL ANGETGGDR		307		Novel
ALSPN#STISSAPK	Q8BJS4-2	648	SUN domain-containing protein 2	Novel
HYQAVHDAGN#DSGHGGEAGLALTR	Q8BL66	68	Early endosome antigen 1	Novel
N#STIQAANLAGLK	Q8BM72	184	Heat shock 70 kDa protein 13	Novel
WLN#ETQLK	Q8BM88	174	Cathepsin O	Novel
KYESAYGTQFTPCQLLLDHANN#SSK	Q8BMS1	756	Trifunctional enzyme subunit alpha, mitochondrial	Novel
SPGAQDN#VSVSQGMR	Q8BS35-2	9	Alkylglycerol monooxygenase	Novel
GGGGN#SSSSGSGSGSGSPSTGSSGSSSPGAR	Q8BSY0	13	Aspartyl/asparaginyl beta-hydroxylase	Novel
IN#VTEVYDK	Q8BTJ4-2	246	Bis	Novel
DGTVTAGN#ASGVSDGAGAVIIASEDAVK	Q8BWT1	249	3-ketoacyl-CoA thiolase, mitochondrial	Novel
KN#ITDLVEGAK	Q8BY89-2	198	Choline transporter-like protein 2	Novel
HLN#ASNPEPATIIFTAAR	Q8BYU6	318	Torsin-1A-interacting protein 2	Novel
VTPN#NTAEAPQLQPTSDLKEDHHEIGAR		46		Novel
NTN#SSNN#LTR	Q8C0Z1	116,120	Protein ITFG3	Reference
DIILHSTGHN#ISR	Q8C129	215	Leucyl-cystinyl aminopeptidase	Potential
EETLLYDN#ATSSVADR		447		Reference
ILDYHQEACN#GCISVGGQIPNNLAVPLYK	Q8C196	1050	Carbamoyl-phosphate synthase , mitochondrial	Novel
N#QSPGSHGGEW R	Q8C7E7	135	Starch-binding domain-containing protein 1	Novel
FINYN#QTVSR	Q8C7X2-2	914	ER membrane protein complex subunit 1	Novel
AN#STQEPSQQPASSGASPLSASEGPESPGSSR	Q8CI51	307	PDZ and LIM domain protein 5	Novel
FN#DTEVLQR	Q8CIF4	127	Biotinidase	Reference
VFKPQSGADALN#DSQDFPF PETPAK	Q8CIV2-2	180	Membralin	Novel
YTSDPN#VTSVGPSK	Q8CJH3	1251	Plexin-B1	Reference
VSQVLHEGGHN#VTK	Q8JZZ0	52	UDP-glucuronosyltransferase 3A2	Novel
GTAGNALMDGASQLVGEN#R	Q8K0E8	384	Fibrinogen beta chain	Novel
N#ESEECTEDTDQAEGTESEPK	Q8K0L9-2	278	Zinc finger and BTB domain-containing protein 20	Novel
AAGVLEDVYN#R	Q8K0R6	306	Glycolipid transfer protein domain-containing protein 2	Novel
HSGLCLETQNWPD SVNQPQFPALLRPGEEYN#HTTWFK	Q8K157	332	Aldose 1-epimerase	Novel
IPFN#LSEWQK	Q8K2I4	89	Beta-mannosidase	Potential
PLCSLVN#SSIVVK		736		Potential
TVAN#LSGCEATDSEALIHCLR	Q8QZR3	275	Carboxylesterase 6	Novel
EN#GTITAA NASTLNDGAAALVLMTAEAAQR	Q8QZT1	279	Acetyl-CoA acetyltransferase, mitochondrial	Novel
WVG N#WTYELK	Q8R084	96	Protein Ugt2b1	Novel

FVN#STGYLTEAEK	Q8R0F3	139	Sulfatase-modifying factor 1	Novel
LQAGTVFVNTYN#K	Q8R0Y6	864		Novel
LTFN#STLN#TSGLVAQGEALPIGAHR	Q8R0Y6	246,250	Cytosolic 10-formyltetrahydrofolate dehydrogenase	Novel
ASQQLSN#ETSSFGFNLLR	Q8R121-2	81	Protein Z-dependent protease inhibitor	Novel
N#VSLWCNENK	Q8R143	51	Pituitary tumor-transforming gene 1 protein-interacting protein	Potential
VGCSEYTN#R		42		Novel
FTFTSHTPGDHQICLHSN#STR	Q8R1V4	117	Transmembrane emp24 domain-containing protein 4	Novel
LGAIN#STLSN#ESK	Q8R2E9	140,145	ERO1-like protein beta	Potential
N#TTHLLQR	Q8R2Q8	70	Bone marrow stromal antigen 2	Novel
CPRCGTFN#GTR	Q8R3C1-2	35	Uncharacterized protein C2orf42 homolog	Novel
ITN#GTVGV	Q8R4U0	71	Stabilin-2	Novel
WQIHN#ISGK	Q8R4Y4-2	1088	Stabilin-1	Potential
VSLTN#VISDEGR	Q8R5M8-2	116	Cell adhesion molecule 1	Reference
GDLNHEGDAN#TSGTGLEGGPKPTDAQTK	Q8VBT9-2	151	Tether containing UBX domain for GLUT4	Novel
DYYPIN#ESLASLPLR	Q8VBZ3	295	Cleft lip and palate transmembrane protein 1 homolog	Potential
TAASILWQAYPILN#ISEK	Q8VCC2	388	Liver carboxylesterase 1	Novel
DGGSTTAGN#SSQVSDGAAVLLAR		274		Novel
N#GSYDIGMACGVESMTLSQR	Q8VCH0	139	3-ketoacyl-CoA thiolase B, peroxisomal	Novel
DQGN#VTDMASMK		444		Novel
TIYN#WSGYPLLCHK	Q8VCI0	412	Phospholipase B-like 1	Novel
VIYN#LTEK	Q8VCM8	428	Nicalin	Potential
N#TTSYPPMCSQDAVGGQVLSELFTR	Q8VCT4	79	Carboxylesterase 1D	Novel
NVN#ISYIVN#DSFFPQRPEK	Q8VCU1-2	308,314	Carboxylesterase 3B	Novel
AGN#ASLTLPNLT	Q8VD31	270	Tapasin-related protein	Novel
WTDNTEYN#NTIPIR	Q91V08	158	C-type lectin domain family 2 member D	Novel
N#ATTYPPMCSQDAAR	Q91WU0	79	Expressed sequence AU018778	Novel
N#GTAHGN#STHPMHSR		240,246		Potential
SWSTVGN#CTAALR	Q91X72	186	Hemopexin	Reference
ELGGAIDSGAAYVLEQASSHIGN#STQAAVR	Q91YH5-2	356	Atlastin-3	Novel
DN#ATDSVPLR		2128		Reference
DN#TTCYEFK		1576		Potential
FGTCSQLCN#NTK		3840		Potential
FN#STEYQVTR		447		Reference
GPCSHLCLINYN#R		1559		Potential
GVTHLN#ISGLK		3954		Potential
IETILLN#GTDR		730		Reference
LN#GTDPIVAADSK	Q91ZX7	4076	Prolow-density lipoprotein receptor-related protein 1	Potential
LNLDGSN#YTLLK		3049		Reference
LTSCATN#ASMCGDEAR		3789		Potential
LYWISSGN#HTINR		1764		Potential
MHLN#GSNVQVLHR		3090		Potential
QTGDVTCN#CTDGR		4365		Potential
WTGHN#VTVVQR		1512		Potential
N#STLCDLCIGPLK	Q921I1	513	Serotransferrin	Novel
HLN#SSLPR	Q921T2-2	392	Torsin-1A-interacting protein 1	Novel
N#ATITQALTNK	Q923B6	323	Metalloreductase STEAP4	Novel
LNFLSPELPAVAEFSTN#ETMGHSADR	Q99JY0	221	Trifunctional enzyme subunit beta, mitochondrial	Novel
FN#STLGPSEEQEK	Q99K41	416	EMILIN-1	Potential
FTFTSHTPGEHQICLHSN#STK	Q99KF1	125	Transmembrane emp24 domain-containing protein 9	Novel
HPN#GTQETILLN#HTFN#ETQIEWFR	Q99KI0	746,755,759	Aconitate hydratase, mitochondrial	Novel
DQHN#GSLTDPSSVHEK	Q99KU0	21	Vacuole membrane protein 1	Novel

LDVLVNNAYAGVQAILN#TTNK	Q99L04	102	Dehydrogenase/reductase SDR family member 1	Novel
MMN#GSHYSYSESR	Q99LX0	135	Protein DJ-1	Novel
QLN#QTASAPN#HTADNGVGAEETLDPNQYYK	Q99MN1	48,55	Lysine--tRNA ligase	Novel
IAPASN#VSHTVVLR	Q9CPW5	88	Translocon-associated protein subunit beta	Novel
AEDCN#QSWHFNLDEIK	Q9CQ01	80	Ribonuclease T2	Novel
NTQADVINASWSVLSN#STR	Q9CQ88	117	Tetraspanin-31	Reference
N#ETIWYLK	Q9CQD8	70	V-type proton ATPase subunit e 1	Novel
GELN#STLFSSR	Q9CQF9	353	Prenylcysteine oxidase	Reference
MSN#ITFR		323		Potential
SPIQEN#SSDSNK		42		Novel
YN#GSLGLWR	Q9CQX5	72	Claudin domain-containing protein 1	Potential
QISYN#CSDLDQSN#VTEETPEGEEHPVADTENK	Q9CY58	245,253	Plasminogen activator inhibitor 1 RNA-binding protein	Novel
VVELLADIVQN#SSLEDSQIEK	Q9CZ13	153	Cytochrome b-c1 complex subunit 1, mitochondrial	Novel
LSQALGN#ITVVQK	Q9CZ42-2	191	ATP-dependent	Novel
FN#GSVSFFR		89		Novel
VDLEDFEN#NTAYAK	Q9D1H9-2	163	Microfibril-associated glycoprotein 4	Novel
EYVN#STSEESHDEDIRPVQQQDLHR	Q9D5T0	316	ATPase family AAA domain-containing protein 1	Novel
KGNN#ESYHYAR	Q9D6Y9	557	1,4-alpha-glucan-branching enzyme	Novel
AGPN#GTLFVVDAYK	Q9D7N9	159	Adipocyte plasma membrane-associated protein	Novel
TEVKPSSN#GSASSASK	Q9DAV9	267	Trimeric intracellular cation channel type B	Novel
IIFAN#VSVR	Q9DBU0	178	Transmembrane 9 superfamily member 1	Novel
WYDHSN#MTFDK	Q9DCG2-2	107	CD302 antigen	Novel
EIVLADVIDN#DSWR	Q9DCL9	211	Multifunctional protein ADE2 [Includes:	Novel
FN#SSSSSLEEK	Q9EPK6	197	Phosphoribosylaminoimidazole-succinocarboxamide synthase	Novel
CFNAMEVDALN#SSHPVSTPVENPAQIR	Q9EQH2	403	Nucleotide exchange factor SIL1	Novel
N#CSTQHFPFR	Q9ESB3	200	Endoplasmic reticulum aminopeptidase 1	Potential
N#VSGTWEFTCQHGELECR	Q9ESY9	105	Histidine-rich glycoprotein	Reference
ALAGLVYN#SSGTEPCYDIYR	Q9ET22	325	Gamma-interferon-inducible lysosomal thiol reductase	Potential
IVDVN#LTSE GK	Q9ET30	172	Dipeptidyl peptidase 2	Potential
TNN#VSEHEDTDKYR	Q9JIF7	369	Transmembrane 9 superfamily member 3	Novel
LDVSQN#VSSD TDQSCESTK	Q9JIM1-2	48	Coatomer subunit beta	Novel
GAESTE QPDNSN#QTQHPGDSSSDGLR	Q9JJK5	112	Equilibrative nucleoside transporter 1	Novel
			Homocysteine-responsive endoplasmic reticulum-resident ubiquitin-like domain member 1 protein	Novel
YATENDISSLHN#STLTCLVN#QTTSLTGTSPEIMEK	Q9JL3-2	132		Novel
		140	Solute carrier organic anion transporter family member 1B2	Potential
GVAVTN#TSQLGFR		75		Novel
NILPN#ITTSYLK	Q9JJX6-2	181	P2X purinoceptor 4	Novel
TSICDS DAN#CTLGSSDTHSSGIGTGR		131		Potential
AAEN#FTLLVK	Q9JJX6-3	184	P2X purinoceptor 4	Potential
NPN#GT VTVISR	Q9JKF6	202	Poliovirus receptor-related protein 1	Reference
AEPLN#ASAGDQEEK		931		Potential
EN#GTD AVQEEEE SPAEGSK		596		Potential
LSALDNL LN#HSSIFLK	Q9JKR6	830	Hypoxia up-regulated protein 1	Potential
VFGSQN#LTTVK		515		Reference
VIN#DTWAWK		862		Potential
TSSIATALN#TSGAGGSRPAQAVR	Q9JM52-2	683	Misshapen-like kinase 1	Novel
MAAALN#ATGR	Q9QWR8	177	Alpha-N-acetylgalactosaminidase	Novel
VN#YTEVSR		201		Potential
QAGIAQLYGIAGSTN#VTGDQVK	Q9QXD6	65	Fructose-1,6-bisphosphatase 1	Novel
N#QTLQEGEK	Q9QYC7	570	Vitamin K-dependent gamma-carboxylase	Novel
VEN#GSETGPLPELQPLLEGEVK		627		Novel

LTGSAGN#YTVQCQK	Q9QZ25	357	Vascular non-inflammatory molecule 3	Potential
HVLTGSADN#SCR	Q9QZD9	74	Eukaryotic translation initiation factor 3 subunit I	Novel
VYIN#DSVELSR	Q9R013	356	Cathepsin F	Potential
HEYQANGPEDLN#R	Q9R0P5	144	Dextrin	Novel
LAEN#FCVCHLATGDMLR	Q9WTP6-2	38	Adenylate kinase 2, mitochondrial	Novel
IDSTGN#VTNELR	Q9WU60	415	Attractin	Potential
DCN#SCGDHFNPDGASHGGPQDTDR	Q9WU84	142	Copper chaperone for superoxide dismutase	Novel
GQTQN#YSTLLLEEASER	Q9WUH7	55	Semaphorin-4G	Novel
DWCN#WTLISR	Q9WUP0	99	Receptor activity-modifying protein 2	Potential
ECHTIQN#YTLWR	Q9WUU7	186	Cathepsin Z	Novel
GYLTSFEMFN#STFK	Q9WUZ9	231	Ectonucleoside triphosphate diphosphohydrolase 5	Novel
SVLEN#TTSYEEAK	Q9WV54	258	Acid ceramidase	Reference
EVMNLLQPLN#VTK	Q9WVJ3-2	382	Carboxypeptidase Q	Novel
KPCN#TSDSHCPPDGR	Q9Z0K8	148	Pantetheinase	Potential
NYFHYN#QSFPPSYNIK	Q9Z0M5	319	Lysosomal acid lipase/cholesteryl ester hydrolase	Potential
YDLPASINYILN#K		159		Potential
GFN#FSAETVAR	Q9Z2A9-2	303	Gamma-glutamyltransferase 5	Potential
LWDPSHPGIQN#ISR		347		Potential
EATIVGEN#ETYPYR	Q9Z2G6-2	554	Protein sel-1 homolog 1	Novel
MYSEGSDIVPQSN#ETALHYFK		377		Novel

indicates the site of N-glycosylation.