

supplementary Table 1A: List of HLA class I associated, tumor-exclusive peptides and underlying source proteins.

Accession	Description	#AT/RT Tumors	% AT/RT Tumors (Total 23)	AT/RT Patient	Peptide	HLA Allotype
P46695	Radiation-inducible immediate-early gene IEX-1	2	9%	ATRT_7	YALDLSTFL	C*03:04 C*03:04
P50336	Protoporphyrinogen oxidase	2	9%	ATRT_6 ATRT_13	RSILLGLLL	C*03:04 C*02:02
Q5TZF3	Ankyrin repeat domain-containing protein 45	2	9%	ATRT_4 ATRT_16	DVIRALAKY	A*26:01 A*26:13
Q8N485	Protein limb expression 1 homolog	2	9%	ATRT_4 ATRT_16	EVISYYSQY	A*26:01 A*26:13
Q8WX77	Insulin-like growth factor-binding protein-like 1	2	9%	ATRT_6 ATRT_16	RLSLLPLL FPAPDDRM	C*04:01 B*35:02
Q969W9	Transmembrane prostate androgen-induced protein	2	9%	ATRT_3 ATRT_16	EVIGHYPGSSF	A*25:01 A*26:13
Q9BW71	HIRA-interacting protein 3	2	9%	ATRT_4 ATRT_16	NIISGSGRPR	A*68:01 A*68:03
O00472	RNA polymerase II elongation factor ELL2	1	4%	ATRT_7	IPFRPSIQF	B*35:01
Q15034	RIMS-binding protein 2	1	4%	ATRT_14	LPFKEGQII	B*51:01
Q15479	Melanoma-associated antigen B2	1	4%	ATRT_19	GVYDGEFHSV	A*02:01
Q15540	Fatty acid-binding protein, brain	1	4%	ATRT_16	LTFGDVVAVR	A*68:03
Q75751	Solute carrier family 22 member 3	1	4%	ATRT_7	SFDEALQVR	C*04:01
P09038	Fibroblast growth factor 2	1	4%	ATRT_7	AEFRGVVSI	B*40:01
P15516	Histatin-3	1	4%	ATRT_20	HEKHSHSRGY	B*18:01
P20809	Interleukin-11	1	4%	ATRT_7	HAILGGLHL	C*03:04
P21554	Cannabinoid receptor 1	1	4%	ATRT_8	KSLDGLADTF	B*57:03
P41146	Nociceptin receptor	1	4%	ATRT_16	ETAVAILR	A*26:13
P49798	Regulator of G-protein signaling 4	1	4%	ATRT_7	KIKSPKSLSPK	A*03:01
Q06889	Early growth response protein 3	1	4%	ATRT_16	FPMPIDYNL	B*35:02
Q49A53	Putative protein LRR37A5P	1	4%	ATRT_14	ILEEMLQVL	A*02:05
Q5VTH2	UPF0740 protein C1orf192	1	4%	ATRT_4	TTAGAASLTK	A*68:01
Q5VU57	Cytosolic carboxypeptidase 6	1	4%	ATRT_4	DAIGGVNSKY	A*26:01
Q68DX3	FERM and PDZ domain-containing protein 2	1	4%	ATRT_13	ALQVRGVAL	C*01:02
Q68E55	Uncharacterized protein KIA0895-like	1	4%	ATRT_8	VYLDGIVRI	A*23:01
Q6NTF7	DNA dC->dU-editing enzyme APOBEC-3H	1	4%	ATRT_6	RPYPRKALL	C*04:01
Q6Q4G3	Aminopeptidase Q	1	4%	ATRT_19	TNIEVVAS	A*68:01
Q6UW12	Prostate androgen-regulated mucin-like protein 1	1	4%	ATRT_19	ALSSGSAITV	A*02:01
Q6ZV07	Storkhead-box protein 1	1	4%	ATRT_4	VFPVGMNPI	C*07:04
Q6ZVU0	Putative uncharacterized protein FU42102	1	4%	ATRT_8	LMLWIMEL	B*13:02
Q6ZW33	MICAL C-terminal-like protein	1	4%	ATRT_6	LIMAGLEL	C*03:04
Q7Z309	Protein FAM122B	1	4%	ATRT_17	ILMDDLSPK	A*03:01
Q7Z3Q1	Solute carrier family 46 member 3	1	4%	ATRT_6	LFVEPAIFL	C*04:01
Q86V59	PNMA-like protein 1	1	4%	ATRT_8	RTWEDVYRL	B*57:03
Q86VP1	Tax1-binding protein 1	1	4%	ATRT_8	QVXIAENVK	A*30:01
Q86V18	PHD finger protein 13	1	4%	ATRT_8	RTVEDFNFK	B*57:03
Q8N1D0	Beckwith-Wiedemann syndrome chromosomal region 1 candidate gene B protein	1	4%	ATRT_17	FPILLSQL	B*51:01
Q8N1I8	Putative uncharacterized protein encoded by CACTIN-AS1	1	4%	ATRT_16	VEDEVLSL	B*40:01
Q8N336	ELMO domain-containing protein 1	1	4%	ATRT_14	KTEDIMEL	C*15:02
Q8N6F7	Germinal center associated signaling and motility protein	1	4%	ATRT_7	TPIQDNVDOY	B*35:01
Q8N729	Neuropeptide W	1	4%	ATRT_21	REAPLLPSW	B*44:03
Q8N9V6	Ankyrin repeat domain-containing protein 53	1	4%	ATRT_8	MFKSQTLLM	C*06:02
Q8ND83	SLAIN motif-containing protein 1	1	4%	ATRT_14	LRRPSLAI	B*51:01
Q8NEY4	V-type proton ATPase subunit C 2	1	4%	ATRT_17	VTSKNSLY	A*01:01
Q8NFN8	Probable G-protein coupled receptor 156	1	4%	ATRT_23	MSSPNLNIVT	n.a
Q8NGK2	Olfactory receptor 52B4	1	4%	ATRT_7	MLNPIYGI	C*04:01
Q8NH64	Olfactory receptor 51A7	1	4%	ATRT_8	MFLVPPML	A*23:01
Q8Z772	Cyclin-dependent kinase-like 2	1	4%	ATRT_16	EVYTDVYATR	A*68:03
Q86S52	Endonuclease 8-like 2	1	4%	ATRT_16	EAFGPDGLQR	A*68:03
Q86DX4	RING finger and SPRY domain-containing protein 1	1	4%	ATRT_18	MIIFLNGNQL	C*07:02
Q86MF6	Coenzyme Q-binding protein COQ10 homolog A, mitochondrial	1	4%	ATRT_16	EYVSNVQEY	A*26:13
Q8NWW7	Uncharacterized protein C2orf42	1	4%	ATRT_16	MPLFTRSF	B*35:02
Q9UBN1	Voltage-dependent calcium channel gamma-4 subunit	1	4%	ATRT_1	FPILSTILL	B*07:02
Q9UHF0	Tachykinin-3	1	4%	ATRT_16	DMHDFVGLM	A*26:13
Q9Y2C4	Nuclease EXOG, mitochondrial	1	4%	ATRT_19	VGAAGAGLALQ	C*01:02
Q9YSJ5	Pleckstrin homology-like domain family A member 3	1	4%	ATRT_8	RSGLLQLW	B*57:03

supplementary Table 1B: List of HLA class II associated, tumor-exclusive peptides and underlying source proteins.

Accession	Description	# AT/RT Tumors	% AT/RT Tumors (Total 23)	AT/RT Patient	Sequence	HLA Restriction
Q8N1K5	Protein THEMIS	8	35%	ATRT_14 ATRT_16 ATRT_13 ATRT_15 ATRT_12 ATRT_9 ATRT_8 ATRT_1	LSIEEDVLAA	HLA Class II
O43909	Exostosin-like 3	4	17%	ATRT_18 ATRT_14 ATRT_13 ATRT_15	EALEVGAVPV AELEKQLYS	HLA Class II HLA Class II
Q6PD74	Alpha- and gamma-adaptin-binding protein p34	4	17%	ATRT_14 ATRT_16 ATRT_13 ATRT_1	LGTEDLIVEV	HLA Class II
Q96N55	Ankyrin repeat and SOCS box protein 16	4	17%	ATRT_14 ATRT_16 ATRT_9 ATRT_8	VLTEEGTTP	HLA Class II
O00139	Kinesin-like protein KIF2A	2	9%	ATRT_18 ATRT_16	EAILEQKIDI	HLA Class II
O15479	Melanoma-associated antigen B2	2	9%	ATRT_19 ATRT_18	GVVDGEEHSV	HLA Class II
O60938	Keratocan	2	9%	ATRT_13 ATRT_2	GPHLRVLRDLGNEIKPP FQLQLARLNKVSRIPOG	HLA Class II HLA Class II
P02814	Submaxillary gland androgen-regulated protein 3B	2	9%	ATRT_18 ATRT_12	GPGRIPPPPPAPY GIFPPPPPPQ GPGRIPPPPPAPYGPVGGIFPPPPPPQ GPGRIPPPPPAPY FVPPPPPPPY GPGFVPPPPPPY GPGIFPPPPPPQ	HLA Class II HLA Class II HLA Class II HLA Class II HLA Class II HLA Class II HLA Class II
P20592	Interferon-induced GTP-binding protein Mx2	2	9%	ATRT_14 ATRT_16	ISLEITSPEV	HLA Class II
P49746	Thrombospondin-3	2	9%	ATRT_12 ATRT_2	EGPQLVADSGVIIDT EGPQLVADSGVIIDT EGPQLVADSGVIIDT EGPQLVADSGVIIDT	HLA Class II HLA Class II HLA Class II HLA Class II
Q13449	Limbic system-associated membrane protein	2	9%	ATRT_14 ATRT_12	LEYSLRQKVDVYDE	HLA Class II
Q8N1I8	Putative uncharacterized protein encoded by CACTIN-AS1	2	9%	ATRT_14 ATRT_13	VEDVELVSL	HLA Class II
Q9ULX7	Carbonic anhydrase 14	2	9%	ATRT_12 ATRT_9	SPIDIQTSVTFDDPLPALQPH TDSVTFDDPLPALQPH QLEKLGTLFSTEEEPS	HLA Class II HLA Class II HLA Class II
A4D2P6	Delphinin	1	4%	ATRT_14	KVSMQLQSGAMPTLVVE	HLA Class II
A6NCC3	Golgin subfamily A member 80	1	4%	ATRT_3	SLDQALLKAAQ	HLA Class II
A6NCV1	Qlfactory receptor 6C74	1	4%	ATRT_2	ITGNLTI	HLA Class II
A6NP81	Golgin subfamily A member 8-like protein 2	1	4%	ATRT_3	SLDQALLKAAQ	HLA Class II
A8MPP1	Putative ATP-dependent RNA helicase DDX11-like protein 8	1	4%	ATRT_1	IFQEPKSAH	HLA Class II
F8WB16	Golgin subfamily A member 8N	1	4%	ATRT_3	SLDQALLKAAQ	HLA Class II
O00180	Potassium channel subfamily K member 1	1	4%	ATRT_2	LLYLVFAGVVFSSVE	HLA Class II
Q14813	Paired mesoderm homeobox protein 2A	1	4%	ATRT_10	AGVAGGGGGGPGAGAA	HLA Class II
O15226	NF-kappa-B-repressing factor	1	4%	ATRT_14	ILESEVIAEA	HLA Class II
O15287	Fanconi anemia group G protein	1	4%	ATRT_14	ESELLLEVA	HLA Class II
O15354	Probable G-protein coupled receptor 37	1	4%	ATRT_5	APGRDPAAGRGAEASAAGPPGPP	HLA Class II
O43861	Probable phospholipid-transporting ATPase IIB	1	4%	ATRT_14	ENEESDYHTLPRARIM	HLA Class II
O75600	2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial	1	4%	ATRT_14	GILEGELEGI	HLA Class II
O75864	Protein phosphatase 1 regulatory subunit 37	1	4%	ATRT_4	EVKGGSCGLE	HLA Class II
O94810	Regulator of G-protein signaling 11	1	4%	ATRT_18	AKKNIRKRGTLVDYKDCYDR	HLA Class II
P01213	Proenkephalin-B	1	4%	ATRT_14	LPSTIKENTLSKS	HLA Class II
POC6E5	Putative high mobility group protein B3-like protein	1	4%	ATRT_5	PNAPKRPPS	HLA Class II
P15515	Histatin-1	1	4%	ATRT_12	GDYGSNLYDN	HLA Class II
P15918	V(D)J recombination-activating protein 1	1	4%	ATRT_15	LESPVKSFLSVLNSLMVKCPA	HLA Class II
P17677	Neuromodulin	1	4%	ATRT_14	DEGKEEPEADQEH	HLA Class II
P19793	Retinoic acid receptor RXR-alpha	1	4%	ATRT_12	LEALAVEP	HLA Class II
P20382	Pro-MCH	1	4%	ATRT_9	LEQYKNDSEFFMN	HLA Class II
P25788	Proteasome subunit alpha type-3	1	4%	ATRT_13	SPDGRVQVEYAMKAVEN	HLA Class II
P29279	Connective tissue growth factor	1	4%	ATRT_12	LAAYRLEDTFGPDPT	HLA Class II
P33681	T-lymphocyte activation antigen CD80	1	4%	ATRT_15	KKMVLTMMSGDMNIWPEYKNRTIF	HLA Class II
P42262	Glutamate receptor 2	1	4%	ATRT_14	DIVDQVITIG	HLA Class II
P48634	Protein PRRCA	1	4%	ATRT_9	KALYPGALGRPPMPMP	HLA Class II
P48745	Protein NOV homolog	1	4%	ATRT_12	LAAYRPEATIGVEV	HLA Class II
Q00587	Cdc42 effector protein 1	1	4%	ATRT_19	GAPRRMSPAPSPAPPAPISP	HLA Class II
Q01968	Inositol polyphosphate 5-phosphatase OCRL-1	1	4%	ATRT_14	AETLLDIA	HLA Class II
Q03395	Rod outer segment membrane protein 1	1	4%	ATRT_18	EALEGLVT	HLA Class II
Q05513	Protein kinase C zeta type	1	4%	ATRT_9	RSPFDITDNDP	HLA Class II
Q13702	43 kDa receptor-associated protein of the synapse	1	4%	ATRT_12	ELVCGLCGESIGEKNSR	HLA Class II
Q15572	TATA box-binding protein-associated factor RNA polymerase I subunit C	1	4%	ATRT_13	MLENFKLEGAGSRTKKKT	HLA Class II
Q32M88	Acid trehalase-like protein 1	1	4%	ATRT_14	LEYRIRTLGGALENAQ	HLA Class II
Q53EQ6	Tigger transposable element-derived protein 5	1	4%	ATRT_8	ISMARRLGGIIGHTPAGPYD	HLA Class II
Q5JRK9	Putative G antigen family E member 3	1	4%	ATRT_2	TKVLEAGDAQP	HLA Class II
Q5KU26	Collectin-12	1	4%	ATRT_14	LANIRLDSVSLRMQ	HLA Class II
Q5QUJ3	Alkaline ceramidase 2	1	4%	ATRT_1	LAVLWVLMCALAM	HLA Class II
Q5T5C0	Syntaxin-binding protein 5	1	4%	ATRT_9	AVLLNLGTIELYGSN	HLA Class II
Q5TA31	E3 ubiquitin-protein ligase RNF187	1	4%	ATRT_14	ALTDYKLRRAFF	HLA Class II
Q63HK5	Teashirt homolog 3	1	4%	ATRT_14	KYQLRRTGGTKFLKN	HLA Class II
Q6E0U4	Dermokine	1	4%	ATRT_12	EAGGAAGSKVSEALGQGT	HLA Class II
Q6P1M0	Long-chain fatty acid transport protein 4	1	4%	ATRT_2	TELRKEGDFP	HLA Class II
Q6P582	Mitotic-spindle organizing protein 2A	1	4%	ATRT_14	GIDPDVFKILVDLLK	HLA Class II
Q6PRD7	Cementoblastoma-derived protein 1	1	4%	ATRT_16	RVPVPPRTAPVSKGE	HLA Class II
Q6ZTY8	Putative uncharacterized protein C12orf63	1	4%	ATRT_5	IRAAQVSEAVLAINLL	HLA Class II
Q7Z2X7	P antigen family member 2	1	4%	ATRT_2	LKIEDEPGDGDVREGIMPT DEPGDGDVREGIMPT TKVLEAGD DEPGDGDVREGIMPTFD TKVLEAGDAQP	HLA Class II HLA Class II HLA Class II HLA Class II HLA Class II
Q7Z6Z6	Patatin-like phospholipase domain-containing protein 5	1	4%	ATRT_14	LNWVVPVHVQKDVPMF	HLA Class II
Q7Z7E8	Ubiquitin-conjugating enzyme E2 Q1	1	4%	ATRT_3	GAVSGSQVATD	HLA Class II
Q86UW9	Probable E3 ubiquitin-protein ligase DTX2	1	4%	ATRT_16	LLAMYCNKDGSLQCPCKTI	HLA Class II
Q86VF2	Immunoglobulin-like and fibronectin type III domain-containing protein 1	1	4%	ATRT_3	LVRGARFSDMG	HLA Class II

Q86XA9	HEAT repeat-containing protein 5A	1	4%	ATRT_12	STDVAASQHMVLVALQ	HLA Class II
Q86VD5	Low-density lipoprotein receptor class A domain-containing protein 3	1	4%	ATRT_18	SRSGSANSASSQAASLLSV	HLA Class II
Q8IUC8	Polypeptide N-acetylgalactosaminyltransferase 13	1	4%	ATRT_18	IISPQVVKV	HLA Class II
Q8IUG1	Keratin-associated protein 1-3	1	4%	ATRT_4	SCCQPSCCETSCCQSPCCETSCCQ	HLA Class II
Q8IVH8	Mitogen-activated protein kinase kinase kinase kinase 3	1	4%	ATRT_2	YVSRFTLQGLYLLHSGKGMHRDIKG	HLA Class II
Q8IVU1	Immunoglobulin superfamily DCC subclass member 3	1	4%	ATRT_13	FVQHPQISIRPAGTTAMFTC	HLA Class II
Q8IXS8	Protein FAM126B	1	4%	ATRT_3	SIGVTEGGTN	HLA Class II
Q8IVF3	Testis-expressed sequence 11 protein	1	4%	ATRT_2	EALSNKGPV	HLA Class II
Q8N2M4	Lysoplasmalogenase-like protein TMEM86A	1	4%	ATRT_9	MVSPVTIVKSEGPK	HLA Class II
Q8N434	Putative transporter SVOPL	1	4%	ATRT_13	RTMIISTIGEIALN	HLA Class II
Q8N6Y0	Usher syndrome type-1C protein-binding protein 1	1	4%	ATRT_9	AEAMVQAILGTQAGPALP	HLA Class II
Q8N987	N-terminal EF-hand calcium-binding protein 1	1	4%	ATRT_9	DKNDDGKLSFEFF	HLA Class II
Q8NDH6	Islet cell autoantigen 1-like protein	1	4%	ATRT_4	IKATGKKEDEHLVA	HLA Class II
Q8NH90	Olfactory receptor SAK2	1	4%	ATRT_9	LSCSNVDINIMLLV	HLA Class II
Q8NH92	Olfactory receptor 151	1	4%	ATRT_13	GTIVGVFFPSSTHPED	HLA Class II
Q8TBE7	Solute carrier family 35 member G2	1	4%	ATRT_12	MATVCSILGVCLVMIPN	HLA Class II
Q8TBC9	Protein kish-A	1	4%	ATRT_5	VILLICTC	HLA Class II
Q8WVM0	Dimethyladenosine transferase 1, mitochondrial	1	4%	ATRT_13	QYLCNVRHIFTIPGOAFVPKPE	HLA Class II
Q8WVP7	Limb region 1 protein homolog	1	4%	ATRT_16	GFVGAALIEILIFLVMV	HLA Class II
Q8WXA2	Prostate and testis expressed protein 1	1	4%	ATRT_12	GSLSMRNDVNEIVAVK	HLA Class II
Q92771	Putative ATP-dependent RNA helicase DDX12	1	4%	ATRT_1	IFQEPKSAH	HLA Class II
Q96A83	Collagen alpha-1(XXVI) chain	1	4%	ATRT_12	EDFLPDAIPLAHP	HLA Class II
Q96AX9	E3 ubiquitin-protein ligase MIB2	1	4%	ATRT_9	EGDTALHVALQRHQL	HLA Class II
Q96GU1	P antigen family member 5	1	4%	ATRT_2	DAPGDGPDVREGTLPFDTPKV	HLA Class II
Q96IK5	Germ cell-less protein-like 1	1	4%	ATRT_15	AFLETEQK	HLA Class II
Q96P71	N-terminal EF-hand calcium-binding protein 3	1	4%	ATRT_9	DKNDDGKLSFEFF	HLA Class II
Q96PZ7	CUB and sushi domain-containing protein 1	1	4%	ATRT_13	CGSPDPVINGHISGDGFSYR	HLA Class II
Q96RD1	Olfactory receptor 6C1	1	4%	ATRT_2	ITGNLTL	HLA Class II
Q96S44	TP53-regulating kinase	1	4%	ATRT_3	MLLKPPLQLNI	HLA Class II
Q99435	Protein kinase C-binding protein NELL2	1	4%	ATRT_14	KIYERVVEKPTDPL	HLA Class II
Q99801	Homeobox protein Nkx-3.1	1	4%	ATRT_14	AFSRASLVSYNS	HLA Class II
Q99935	Proline-rich protein 1	1	4%	ATRT_14	VLLNATVQVTTSNQT	HLA Class II
Q98PX5	Actin-related protein 2/3 complex subunit 5-like protein	1	4%	ATRT_15	GDMLRFAFHAALRNSPVN	HLA Class II
Q98SL1	Ubiquitin-associated domain-containing protein 1	1	4%	ATRT_16	IFOTLNRT	HLA Class II
Q98TN0	Leucine-rich repeat and fibronectin type-III domain-containing protein 3	1	4%	ATRT_17	NQLAALAAGAL	HLA Class II
Q98VA6	Adenosine monophosphate-protein transferase FICD	1	4%	ATRT_1	SKPDRAGHAA	HLA Class II
Q98XJ0	Complement C1q tumor necrosis factor-related protein 5	1	4%	ATRT_10	SIKTDSTFSGLVYSDWHS	HLA Class II
Q9C0B9	Zinc finger CCHC domain-containing protein 2	1	4%	ATRT_12	QNSSLSTAATSPO	HLA Class II
Q9H1K0	Rabenosyn-5	1	4%	ATRT_5	LAKQGGT	HLA Class II
Q9H7B7	Uncharacterized protein C7orf69	1	4%	ATRT_2	LYKFCQTKCR	HLA Class II
Q9NRA0	Sphingosine kinase 2	1	4%	ATRT_15	DWVTLGGDFVLMMLA	HLA Class II
Q9NUW8	Tyrosyl-DNA phosphodiesterase 1	1	4%	ATRT_14	VGALEKNGTQLMIRSY	HLA Class II
Q9NVH2	Integrator complex subunit 7	1	4%	ATRT_2	SRENIQAL	HLA Class II
Q9NZ52	ADP-ribosylation factor-binding protein GGA3	1	4%	ATRT_12	DEELLCLGLADPAPNVPPK	HLA Class II
Q9NZU5	LIM and cysteine-rich domains protein 1	1	4%	ATRT_13	LTSDEDDRKIGRL	HLA Class II
Q9P2D7	Dynein heavy chain 1, axonemal	1	4%	ATRT_14	NIFLSGIANSERADNLK	HLA Class II
Q9UKR3	Kallikrein-13	1	4%	ATRT_13	ALLVQGRLLCGGVLVHPK	HLA Class II
Q9UL15	BAG family molecular chaperone regulator 5	1	4%	ATRT_18	LSEIQGEVLS	HLA Class II
Q9ULF5	Zinc transporter ZIP10	1	4%	ATRT_3	KNNAIISLR	HLA Class II
Q9UMX3	Bcl-2-related ovarian killer protein	1	4%	ATRT_1	ISLOSEPVT	HLA Class II
Q9UNW9	RNA-binding protein Nova-2	1	4%	ATRT_15	LAISTALNTL	HLA Class II
Q9UPU3	VP510 domain-containing receptor SorCS3	1	4%	ATRT_14	AGNALIQDTKEIAVHE	HLA Class II
Q9UQ10	Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase	1	4%	ATRT_14	LDIGYCVQFTSMVFGGQ	HLA Class II
Q9Y4A0	Jerky protein homolog-like	1	4%	ATRT_2	KAVLLLDNSPHTPN	HLA Class II
Q9Y4K0	Lysyl oxidase homolog 2	1	4%	ATRT_12	VPGQVFSPPGSRF	HLA Class II
Q9Y661	Heparan sulfate glucosamine 3-O-sulfotransferase 4	1	4%	ATRT_2	SEMITAQSAALPEREAQESITTD	HLA Class II
Q9Y672	Dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase	1	4%	ATRT_13	FLLGKCFKGLKGGKGFV	HLA Class II