

# Supplemental Figure 1

AAT-1	--MTAEK <b>EPL</b> KSREGDEAP <b>QNET</b> EGKGK <b>GLEKSLTLFNGV</b> SMIVGCIIGSGIFVSPTGVQ
AAT-2	-----MNEK <b>EEFV</b> SLNQIK <b>LKPRISL</b> FNGCT <b>TIITIGV</b> IIGSGIFVSPK <b>GV</b> L
AAT-3	MGKQEQS <b>EPL</b> NQEPSN-- <b>EHHDE</b> EVGDK <b>GLEKMTL</b> FNGV <b>SIIVGCIIGSGIF</b> I <b>SPTGIQ</b>
AAT-1	<b>EQAGSVGLSLIVW</b> LIS <b>GIIFTA</b> IGAYCYAEL <b>GLTIK</b> KSGGDYAYIMEAF <b>GPVAF</b> I <b>IRLWIE</b>
AAT-2	<b>LEAGSAGMSL</b> LIWLLSGV <b>FAMIGAV</b> CV <b>YSEL</b> GLTIP <b>KSGGDYAYI</b> YEAF <b>GPLPSFI</b> FLWVA
AAT-3	<b>AQAGSVGLSLIVW</b> VLS <b>GLFAG</b> IGAF <b>FCYAEL</b> GLTIR <b>KSGGDYAYI</b> MEAF <b>GPFLA</b> FLRLWIE
AAT-1	<b>AIVVRPCTV</b> TIVAL <b>TFAIYGLR</b> PF <b>FPDCAP</b> PD <b>VVAEL</b> LA <b>ILLIVL</b> MTAINCIS <b>VR</b> LATIV
AAT-2	<b>LVIINPTSL</b> AI <b>IAIT</b> CATYAL <b>QPFY</b> - <b>SCP</b> VPD <b>VVNL</b> FAGC <b>IIAV</b> LT <b>FINC</b> WD <b>V</b> RMATRT
AAT-3	<b>SIVVRPCTA</b> TIVAL <b>TFAIYML</b> K <b>PFYPDC</b> DS <b>PPL</b> ST <b>ELIA</b> ALL <b>LVL</b> LTAVNCIS <b>V</b> KWASKV
AAT-1	<b>QDWF</b> TI <b>AKVVA</b> LC <b>LIIL</b> T <b>GLGL</b> FF <b>GESQ</b> YK <b>DSFENIF</b> ENT <b>SQD</b> FTKV <b>SLAFYS</b> GLFAYS
AAT-2	<b>NDF</b> FTIT <b>KLIAL</b> TL <b>IIT</b> CGGY <b>WLSL</b> GHIDNL <b>VMPD</b> VA <b>EGS</b> QTKLSAI <b>AMAFYS</b> GV <b>SFS</b>
AAT-3	<b>QDFF</b> F <b>VT</b> K <b>TAA</b> LV <b>LI</b> IF <b>TGL</b> WN <b>MVS</b> G <b>KPEAF</b> DSFENI <b>FENTAK</b> D <b>LETA</b> SLAFYS <b>GLFAYQ</b>
AAT-1	<b>GWN</b> FLNFIVEEL <b>QNP</b> KRN <b>LPLA</b> IAIS <b>ITS</b> CT <b>VIYV</b> LT <b>NVAL</b> YTA <b>ISP</b> DEML <b>ESPA</b> VAVLF
AAT-2	<b>GFSY</b> LN <b>FVTE</b> EEL <b>KNP</b> FRN <b>LPR</b> AIYIS <b>IPIV</b> TIVY <b>MIVN</b> IAY <b>FSV</b> LT <b>VDE</b> ILDSDAV <b>AITF</b>
AAT-3	<b>GWN</b> YLN <b>FIVE</b> EEL <b>QNP</b> KRN <b>LPLS</b> IAIS <b>CSL</b> CT <b>IY</b> T <b>LT</b> NVALY <b>TSIT</b> PDEML <b>ASPA</b> VAVLF
AAT-1	<b>ANK</b> LY <b>GKFA</b> -- <b>FIM</b> PLCVAC <b>STIG</b> SANG <b>VIF</b> TSAR <b>LFYS</b> GARE <b>GQMP</b> AV <b>LT</b> MINK <b>KTK</b> TP
AAT-2	<b>ADK</b> IL <b>GT</b> F <b>GSKI</b> LM <b>PLFV</b> S <b>FSC</b> V <b>GLN</b> GILIT <b>CSR</b> M <b>FFS</b> GAR <b>NSQL</b> PE <b>LF</b> FAMIS <b>IR</b> QLTP
AAT-3	<b>AEK</b> NY <b>GW</b> FA-- <b>FC</b> MPI <b>FVAC</b> STIG <b>SANG</b> V <b>ILT</b> SS <b>R</b> LFY <b>CG</b> ARE <b>GQMP</b> N <b>V</b> LT <b>MV</b> N <b>KTK</b> TP
AAT-1	<b>I</b> PAVIL <b>TGALS</b> IA <b>YLL</b> ASK <b>DVY</b> QLIN <b>YIQ</b> IS <b>Y</b> WLAIG <b>TAIA</b> AL <b>FWL</b> RR <b>TMP</b> DA--- <b>SR</b> PI
AAT-2	<b>I</b> PS <b>LIF</b> LG <b>TS</b> IV <b>MLF</b> - <b>IGN</b> V <b>FQ</b> LIN <b>YLS</b> FAES <b>L</b> V <b>V</b> FS <b>SV</b> AG <b>L</b> L <b>K</b> LR <b>F</b> TM <b>PEN</b> V <b>L</b> NAR <b>PI</b>
AAT-3	<b>I</b> PAVIL <b>TG</b> LL <b>SL</b> LY <b>LL</b> LS <b>N</b> NI <b>Y</b> SLIN <b>YIQ</b> V <b>SY</b> W <b>IA</b> IG <b>G</b> AIL <b>AL</b> F <b>YFR</b> K <b>TMP</b> DA--- <b>P</b> RAV
AAT-1	<b>KV</b> PLI <b>WPA</b> I <b>FL</b> AG <b>CIAL</b> V <b>LIP</b> MV <b>AA</b> PR <b>D</b> TGI <b>GL</b> LIM <b>LSA</b> VP <b>VYGI</b> F <b>IG</b> W <b>K</b> N <b>KPK</b> W <b>F</b> NEF
AAT-2	<b>KIS</b> LL <b>W</b> PIL <b>FF</b> LM <b>CL</b> FL <b>LIL</b> PF <b>FHS</b> D <b>PE</b> WELI <b>YGV</b> FL <b>V</b> LS <b>GIP</b> I <b>YV</b> LF <b>V</b> YN <b>KYR</b> F <b>GFI</b> Q <b>S</b> V
AAT-3	<b>KAP</b> IV <b>FPI</b> I <b>FFI</b> GC <b>V</b> LL <b>VLP</b> V <b>LGN</b> PK <b>D</b> TAI <b>GIL</b> IM <b>LSG</b> VP <b>VYL</b> I <b>FIA</b> W <b>K</b> G <b>KPK</b> C <b>IDS</b> L
AAT-1	<b>I</b> DS <b>ST</b> V <b>F</b> IQ <b>L</b> K <b>L</b> FM <b>V</b> DE <b>D</b> K <b>E</b> D
AAT-2	<b>W</b> IG <b>F</b> TH <b>F</b> IQ <b>L</b> F <b>Y</b> CV <b>PE</b> L <b>S</b> SS
AAT-3	<b>T</b> DS <b>V</b> T <b>I</b> FT <b>Q</b> K <b>L</b> FM <b>V</b> D <b>A</b> N <b>K</b> E