

S3 Fig

	EP	G	M	F	d	r1	w	pdt	f	n	h	t	r	g	k	s	c	l	P
H.sapiens-alpha1	IR6	GL1	ERV1	VK1	D11	V1	S1	G1	P1	R1	K1	R1	G1	N1	M1	N1	M1	P1	174
H.sapiens-alpha2	IR6	GL1	ERV1	S1	V1	I1	N1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	174
H.sapiens-alpha3	IR6	GL1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	199
H.sapiens-alpha4	IR6	GL1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	180
H.sapiens-alpha5	IR6	GL1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	181
H.sapiens-alpha6	IR6	GL1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	164
H.sapiens-beta1	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	169
H.sapiens-beta2	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	168
H.sapiens-beta3	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	169
H.sapiens-gamma1	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	196	
H.sapiens-gamma2	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	198	
H.sapiens-gamma3	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	179	
R.norvegicus-alpha1	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	173
R.norvegicus-alpha2	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	227
R.norvegicus-alpha3	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	199
R.norvegicus-alpha4	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	180
R.norvegicus-alpha5	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	181
R.norvegicus-alpha6	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	164
R.norvegicus-beta1	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	169
R.norvegicus-beta2	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	168
R.norvegicus-beta3	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	169
R.norvegicus-gamma1	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	196	
R.norvegicus-gamma2	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	197	
R.norvegicus-gamma3	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	179	
R.norvegicus-gamma4	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	174	
D.rexio-alpha1	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	180
D.rexio-alpha4	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	180
D.rexio-alpha6	IR6	GR1	ERV1	V1	K1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	159
D.rexio-beta1	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	167
D.rexio-beta2	IR6	GS6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	198
D.rexio-gamma2	IR6	GV1	RT1	V1	D11	V1	S1	G1	P1	R1	K1	R1	N1	M1	N1	M1	P1	179	
P.dominalua-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	179
H.saltador-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	179
L.striatella-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	175
A.mellifera-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	178
I.castaneum-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	171
C.felis-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	177
N.lugens-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	176
D.melanogaster-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	193
B.mori-RDL2	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	177
B.mori-RDL3	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	172
B.mori-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	174
P.yxlostella-RDL2	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	177
P.yxlostella-RDL1	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	174
A.estunus-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	188
D.simulans-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	193
A.aegypti-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	188
O.crypsae-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	171
M.domestica-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	191
S.furcifera-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	176
N.vitripennis-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	140
L.cuprina-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	191
S.litura-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	174
S.litura-RDL2	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	177
T.cinambarinus-RDL3	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	177
T.cinambarinus-RDL2	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	192
C.salei-RDL	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	174
C.supressalis-RDL1	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	177
C.supressalis-RDL2	VR6	GG6	GPV1	DG	HR1	V1	A1	S1	M1	N1	S1	G1	P1	R1	K1	R1	G1	M1	174
Consensus	EP	G	M	F	d	r1	w	pdt	f	n	h	t	r	g	k	s	c	l	P

	t	Ip	y	d	c	v	1	y	
H.sapiens-alpha1	TSLSIARNS	PRVWHTIAK	WIFIAY	SAE	IEEFATV			.FTKRGYAWDGKSUVPE..	.PKPKVKVDEP.L..I.KRNNTYAP.TATSYT
H.sapiens-alpha2	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV		.FTKRGYAWDGKSUVND..	.R.KRKESAV.N.IQNNAYAV.AVANYA
H.sapiens-alpha3	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV		.FTKRSNAMEGVKEPEALRMK..	.TFTTFFN..VTTTYP
H.sapiens-alpha4	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTNIQMEKA	.TRTSKPPQEVAAFVGREKHPALQLNTNANLNRHTRNALVHSESDVGHRTEVGHHSSRSSTVIGS	
H.sapiens-alpha5	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV		.FTKRGYAWDGKSUVPE..	
H.sapiens-alpha6	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTNLQTCRRAQFA	.R.KRKESAV.N.IQNNAYAV.AVANYA	
H.sapiens-beta1	TINTHREL	FLIIVWVKA	IYLHGSV	VLA	MLEAYFVN			.IFFGRGF..	.CKRKGASKDQSANEERNLEM... .NPVQ.. .VD..AHGN..
H.sapiens-beta2	TINTHREL	FLIIVWVKA	IYLHGSV	VLA	MLEAYFVN			.IFFGRGRCRQ	.CKAAEKAASANNEHRLDV.. .NPM.. .D..PHEN..
H.sapiens-beta3	TINTHREL	FLIIVWVKA	IYLHGSV	VLA	MLEAYFVN			.IFFGRGRCRQ	.CKLAETAKARAKNRSSES.. .NVR.. .D..AHGN..
H.sapiens-gamma1	TSLSIARNS	PRVWHTIAK	GLFVSVEI	SVI	SAE	AMAEYGTE		.FTSNGKGTATAKRLRNKNSAMT..	.GLPFGSTLIPM
H.sapiens-gamma2	TSLSIARNS	PRVWHTIAK	GLFVSVEI	SVI	SAE	AMAEYGTE		.FTVSNSRKE..	.KERKRKNPAP..TI..
H.sapiens-gamma3	TSLSIARNS	PRVWHTIAK	GLFVSVEI	SVI	SAE	AMAEYGTE		.DIRPSRATIQNNM..	.YSSCRFPTTHTKTSLLHDPSSSW..
R.norvegicus-alpha1	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT	
R.norvegicus-alpha2	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTKRGYAWDGKSUVND..	.R.KRKESAV.N.IQNNAYAV.AVANYA	
R.norvegicus-alpha3	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTKRSNAMEGVKEPEALRMK..	.TFTTFFN..VTTTYP	
R.norvegicus-alpha4	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTNLQTCRRAQFA	.R.KRKESAV.N.IQNNAYAV.AVANYA	
R.norvegicus-alpha5	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV		.FTKRGYAWDGKSUVPE..	
R.norvegicus-alpha6	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTNLQTCRRAQFA	.R.KRKESAV.N.IQNNAYAV.AVANYA	
R.norvegicus-beta1	TINTHREL	FLIIVWVKA	IYLHGSV	VLA	MLEAYFVN			.IFFGRGF..	.CKRKGASKDQSANEERNLEM... .NPVQ.. .VD..AHGN..
R.norvegicus-beta2	TINTHREL	FLIIVWVKA	IYLHGSV	VLA	MLEAYFVN			.IFFGRGRCRQ	.CKAAEKAASANNEHRLDV.. .NPM.. .D..PHEN..
R.norvegicus-beta3	TINTHREL	FLIIVWVKA	IYLHGSV	VLA	MLEAYFVN			.IFFGRGRCRQ	.CKLAETAKARAKNRSSEI.. .NVR.. .D..AHGN..
R.norvegicus-gamma1	TSLSIARNS	PRVWHTIAK	GLFVSVEI	SVI	SAE	AMAEYGTE		.FTSNGKGTATAKRLRNKNSAMT..	.GLPFGSTLIPM
R.norvegicus-gamma2	TSLSIARNS	PRVWHTIAK	GLFVSVEI	SVI	SAE	AMAEYGTE		.FTVSNSRKE..	.KERKRKNPAP..TI..
R.norvegicus-gamma3	TSLSIARNS	PRVWHTIAK	GLFVSVEI	SVI	SAE	AMAEYGTE		.DIRPSRATIQNNM..	.YSSCRFPTTHTKTSLLHDPSSSW..
D.dominalua-RDL	TMMSKTA	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
D.rerio-alpha1	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTNAQACERA	.R.RKQKAKA..	
D.rerio-alpha4	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTNAQACERA	.R.RKQKAKA..	
D.rerio-alpha6	TSLSIARNS	PRVWHTIAK	WIFIAY	CAVE	SAE	IEEFATV	FTNAQACERA	.R.RKQKAKA..	
D.rerio-beta2	TINTHREL	FLIIVWVKA	IYLHGSV	VLA	MLEAYFVN			.IFFGRGF..	.CKRKGASKDQSANEERNLEM... .NPVQ.. .VD..AHGN..
D.rerio-gamma2	TSLSIARNS	PRVWHTIAK	GLFVSVEI	SVI	SAE	AMAEYGTE		.IFFGRGRCRQ	.CKAAEKAASANNEHRLDV.. .NPM.. .D..PHEN..
H.saltator-RDL	TMMSKTA	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
L.strigellata-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
A.mellifera-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
T.castaneum-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
felis-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
N.lugens-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
D.melanogaster-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
B.mori-RDL2	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
B.mori-RDL3	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
B.mori-RDL1	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
P.xylostella-RDL2	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
P.xylostella-RDL1	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
A.funestus-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
D.similans-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
A.aegypti-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
O.oryzae-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
M.domestica-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
S.furcifera-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
N.vitripennis-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
L.cuprina-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
S.litura-RDL1	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
S.litura-RDL2	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
T.cimicabarinus-RDL3	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
T.cimicabarinus-RDL2	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
T.cimicabarinus-RDL1	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
C.caiehi-RDL	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
C.supressalis-RDL1	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
C.supressalis-RDL2	LMSSNTAHL	PRVWHTIAK	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	WVLSLWV	.FTKRGYAWDGKSUVPE..	.PKPKVKED..I..KRNNTYAP.TATSYT
Consensus	t	Ip	y	d	c	v	1	y	

H.sapiens-alpha1	FNLARGDPGLATIKA.SATIEP.....KEVKPET..KPFPEKKFTNFSV.....	416
H.sapiens-alpha2	FNLSK.DPVLTISK.TATIEP.....PNKKRPN..KEPAEAKTITNFSV.....	414
H.sapiens-alpha3	INLAK.ITEFSTISKG.APASSTTFITIASPSKATIVQ..ESFTEITKTYNFSV.....	451
H.sapiens-alpha4	SKGTFRSYLAASSPNFSRANAAETISAARALPSAPSFTSI..RTGWMFRKAQSVGSASTRHVFGRSR.	482
H.sapiens-alpha5	SHFFN.IPKEEQTFAGISNTS.....SVKFSE..KTSSESKRTYNSI..	422
H.sapiens-alpha6	.....AFFTVIISKATEPLEAIEVHL..PSKYHKLKRITISLSP1PIVSSE.	386
H.sapiens-beta1	.....ILLSTLIEKNEHATSEAMVGLDFRSTTHLAYDASSIQVRP.	407
H.sapiens-beta2	EMN.....EVAGSGIGETRNSAISFNSG1QVQRK.	406
H.sapiens-gamma1	I.....SVPO..EDDYGYQ...CLIGRDCA5.FCCCEFDCTGTWSREGRIHI.	405
H.sapiens-gamma2	A.....THL...QERDEEYGECLIGRDCA5.FCCCEFDCTGTWSREGRIHI.	434
H.sapiens-gamma3	SLIDMRPEPTAIIILNNSYNWNCEEFDTICVYE..CLIGRDCA5.FCCCEFDCTGTWSREGRIHI.	436
R.norvegicus-alpha1	FNLARGDPGLATIKA.SATIEP.....KEVKPET..KPFPEKKFTNFSV.....	436
R.norvegicus-alpha2	FNLSK.DPVLTISK.TATIEP.....PNKKRPN..KEPAEAKTITNFSV.....	415
R.norvegicus-alpha3	INLAK.ITEFSTISKG.APASSTTFITIASPSKATIVQ..ESFTEITKTYNFSV.....	467
R.norvegicus-alpha4	SETIFKAFLASSPNFSRANAAETISAAMGLSAASAP..SPHFLQLQAPLRSASARPAFGAR.	453
R.norvegicus-alpha5	THPPN.IPKEEQLPFGTGNWVTA.....SIRASEE..KTSSESKRTYNSI..	480
R.norvegicus-alpha6	.....AKPFPVSKRTTESLEAIEVHL..SDSKYHKLKRISSTLPIVSSE.	424
R.norvegicus-beta1	.....ILLSTLIEKNEHATSEAMVGLDFRSTTHLAYDASSIQVRP.	386
R.norvegicus-beta2	EMN.....EVAGSGIGETRNSAISFNSG1QVQRK.	407
R.norvegicus-beta3	I.....SMFO..GEDDGYQ...CLIGRDCA5.FCCCEFDCTGTWSREGRIHI.	406
R.norvegicus-gamma1	A.....THL...QERDEEYGECLIGRDCA5.FCCCEFDCTGTWSREGRIHI.	405
R.norvegicus-gamma2	SLIDMRPEPTAIIILNNSYNWNCEEFDTICVYE..CLIGRDCA5.FCCCEFDCTGTWSREGRIHI.	434
R.norvegicus-gamma3	ENIAR.DPGLATIAK.SAPFFF.....TEPKKEPKPEFEAKTITNFSV.....	435
D.rerio-alpha1	.....AAAASVKSSTGKNUKIDTEEVLQNSITINGNLRRKVRNHSNIQPGAEASK.	418
D.rerio-alpha4	.....SKRKGRYSV.	404
D.rerio-alpha6	DPFIAEADALGLGDORLKMTPDIDLRLTIVEMHNEMGFSDLRSRLGDFRSTMLAYDSSLTLOVRAA.	330
D.rerio-beta2	N.....ATGM...QERDEEYGECLIGKDCTS.FCCCEFDCTGSARWRGHLH.	451
D.rerio-gamma2	.....HAFQCT..VRFKVM.	445
P.dominula-RDL	.....HAFQCT..VRFKVM.	388
H.saltator-RDL	.....HAFQCT..VRFKVM.	389
L.striatulae-RDL	.....HAFQCT..ATRYKT.	392
A.mellifera-RDL	.....HAFQCT..VRFKVM.	387
T.castaneum-RDL	.....DSIHAFQCTVSP1IGHEVRKVM.	383
C.felis-RDL	GGPGEISHAFQCT..VRFKVM.	387
N.lugens-RDL	.....HAFQCT..VRFKVM.	388
D.melanogaster-RDL	VGGFGGGGGGVNVVGVMGMCFFEGHHGHMHASHGHGHPHAPKQTVSNRPIFGSHI..QCNVGTGRC5IVGFLQ..	481
B.mori-RDL2	SR.....ELFESRSS.	EGRFKA
B.mori-RDL3	NR.Y.....FEGSRASVSRSSO.	EVRKVM
B.mori-RDL1	SR.C.....FESRFS.	EVRKVM
P.xylostella-RDL2	SRSHTPGHPPHPHPHPLHHSHPHGPHERSS.	EVRKVM
P.xylostella-RDL1	GR.C.....FEGRES.	EVRKVM
A.funestus-RDL	GHSHTHCHTERPKCQMGSRSGTMCVNPFNM.	EGRGCSIVGFLQ..
D.simulans-RDL	VGGFGGGGGGVNVVGVMGMCFFEGHHGHMHASHGHGHPHAPKQTVSNRPIFGSHI..QCNVGTGRC5IVGFLQ..	EVRKVM
A.aegypti-RDL	GHSHTHCHTERPKCQMGSRSS.	EVRKVM
O.oryzae-RDL	.....GFLQ..	EVRKVM
M.domestica-RDL	.....MVCHGGHGHHGHMHASHGHHVPHPKQTVSNRPIFGCTNQQNIGGRGCSIVGFLQ..	EVRKVM
S.furcifera-RDL	.....HAFQCT..VRFKVM.	451
N.vitripennis-RDL	.....HAFQCT..VRFKVM.	388
L.cuprina-RDL	.....HAFQCT..VRFKVM.	350
S.liturea-RDL1	SR.C.....FEGRFS.	421
S.liturea-RDL2	TR.....PEFESRSS.	392
T.cinnabarinus-RDL3	.....LPSHHNSNSTSGHLLT1SDRGCGGSSGATGAGVGCLSNNG.	397
T.cinnabarinus-RDL2	.....AAAAA..DAAVFCACAOVPCPLICATIGL.	405
T.cinnabarinus-RDL1	LSSSDFPSGFCSPHINCNNSNSSENISTTNPIMNNINNSNNGVSSVGPMSGTSTFNQCTTIGLJUVD5ALHGSGLTGJSVCSASATVGVESVPKHCYCOOCOGQPHHHHLTHHRRSSYQO	395
C.salei-RDL	.....AAAAAE..GSERCF.	518
C.supressalis-RDL1	GR.C.....FEGRES.	372
C.supressalis-RDL2	NR.....ELFESRSS.	392
Consensus		397

H.sapiens-alpha1	.....	416
H.sapiens-alpha2	.....	414
H.sapiens-alpha3	.....	451
H.sapiens-alpha4	.....	482
H.sapiens-alpha5	.....	422
H.sapiens-alpha6	.....	386
H.sapiens-beta1	.....	407
H.sapiens-beta2	.....	406
H.sapiens-beta3	.....	405
H.sapiens-gamma1	.....	434
H.sapiens-gamma2	.....	436
H.sapiens-gamma3	.....	436
R.norvegicus-alpha1	.....	415
R.norvegicus-alpha2	.....	467
R.norvegicus-alpha3	.....	453
R.norvegicus-alpha4	.....	480
R.norvegicus-alpha5	.....	424
R.norvegicus-alpha6	.....	386
R.norvegicus-beta1	.....	407
R.norvegicus-beta2	.....	406
R.norvegicus-beta3	.....	405
R.norvegicus-gamma1	.....	434
R.norvegicus-gamma2	.....	435
R.norvegicus-gamma3	.....	436
D.rerio-alpha1	.....	418
D.rerio-alpha4	.....	404
D.rerio-alpha6	.....	330
D.rerio-beta2	.....	451
D.rerio-gamma2	.....	445
P.dominula-RDL	.....	388
H.saltator-RDL	.....	389
L.striatella-RDL	.....	392
A.mellifera-RDL	.....	387
T.castaneum-RDL	.....	383
C.felis-RDL	.....	387
N.lugens-RDL	.....	388
D.melanogaster-RDL	.....	481
B.mori-RDL2	.....	397
B.mori-RDL3	.....	397
B.mori-RDL1	.....	391
P.xylostella-RDL2	.....	420
P.xylostella-RDL1	.....	393
A.funestus-RDL	.....	443
D.simulans-RDL	.....	481
A.aegypti-RDL	.....	424
OORYZAE-RDL	.....	375
M.domestica-RDL	.....	451
S.furcifera-RDL	.....	388
N.vitripennis-RDL	.....	350
L.cuprina-RDL	.....	421
S.litura-RDL1	.....	392
S.litura-RDL2	.....	397
T.cinnabarinus-RDL3	.....	405
T.cinnabarinus-RDL2	.....	395
T.cinnabarinus-RDL1	.....	372
C.salei-RDL	.....	392
C.suppressalis-RDL1	.....	397
C.suppressalis-RDL2	.....	397
Consensus	.....	.....

H.sapiens-alpha1	.....	416
H.sapiens-alpha2	.....	414
H.sapiens-alpha3	.....	451
H.sapiens-alpha4	.....	L...QRKTTVN
H.sapiens-alpha5	.....	491
H.sapiens-alpha6	.....	422
H.sapiens-beta1	.....	A...
H.sapiens-beta2	.....	307
H.sapiens-beta3	.....	446
H.sapiens-gamma1	.....	448
H.sapiens-gamma2	.....	447
H.sapiens-gamma3	.....	RIAK...
R.norvegicus-alpha1	.....	448
R.norvegicus-alpha2	.....	410
R.norvegicus-alpha3	.....	DILE...
R.norvegicus-alpha4	.....	440
R.norvegicus-alpha5	.....	415
R.norvegicus-alpha6	.....	415
R.norvegicus-beta1	.....	467
R.norvegicus-beta2	.....	453
R.norvegicus-beta3	.....	L...QRKTTVN
R.norvegicus-gamma1	.....	489
R.norvegicus-gamma2	.....	424
R.norvegicus-gamma3	.....	A...
D.rerio-alpha1	.....	387
D.rerio-alpha4	.....	448
D.rerio-alpha6	.....	448
D.rerio-beta2	.....	449
D.rerio-beta3	.....	447
R.norvegicus-beta2	.....	RIAK...
R.norvegicus-gamma1	.....	438
R.norvegicus-gamma2	.....	RIAK...
R.norvegicus-gamma3	.....	439
D.rerio-gamma2	.....	EWSE...
D.rerio-gamma3	.....	440
D.rerio-alpha1	.....	418
D.rerio-alpha4	.....	TQTEASSSKGAS
D.rerio-alpha6	.....	417
D.rerio-beta2	.....	S...
D.rerio-gamma2	.....	331
P.dominula-RDL	.....	493
H.saltator-RDL	.....	RWAK...
L.striatella-RDL	.....	449
A.mellifera-RDL	.....	422
T.castaneum-RDL	.....	423
C.felis-RDL	.....	432
N.lugens-RDL	.....	421
D.melanogaster-RDL	.....	427
B.mori-RDL2	.....	428
B.mori-RDL3	.....	423
B.mori-RDL1	.....	549
P.xylostella-RDL2	.....	440
P.xylostella-RDL1	.....	435
A.funestus-RDL	.....	427
D.simulans-RDL	.....	465
A.aegypti-RDL	.....	430
OORYZAE-RDL	.....	502
M.domestica-RDL	.....	549
S.furcifera-RDL	.....	478
N.vitripennis-RDL	.....	420
L.cuprina-RDL	.....	518
S.litura-RDL1	.....	424
T.cinnabarinus-RDL3	SGHYDERSYTCSSPFTHRSTLRTNTAHMIONHEDSIGSGGVHYPESEVRYLSEMKTGSRGASCITISTGEPICSGNSGGGTGGGGCAGATSTPLISRRSMEQS...	660
T.cinnabarinus-RDL2	.....	461
T.cinnabarinus-RDL1	.....	734
C.salei-RDL	.....	430
C.suppressalis-RDL1	.....	430
C.suppressalis-RDL2	.....	441
Consensus	.....	.....

H.sapiens-alpha1	.....		SKIDRSLRIAFELLEFGI	433
H.sapiens-alpha2	.....		,SKIDRMSRIVEPVLFGT	431
H.sapiens-alpha3	.....		,SKWDRISRIFPVLFGT	532
H.sapiens-alpha4	TIG.....	ATGKLSATPP	,SKIDRMSRIVEPVLFGT	439
H.sapiens-alpha5	.....		,PPPLSPAGGGTISKIDCYSRILFPVAFAG	431
H.sapiens-alpha6	.....	NKVIETRAFILQSTFVT	,PPPLSPAGGGTISKIDCYSRILFPVAFAG	431
H.sapiens-beta1	.....	IIDKWSRMFPIITTSFLFNIV.	,MDSYARIFPFETPFTVH	474
H.sapiens-beta2	.....	IIDWRSRIFPFVVSFSFFNIV.	,MDSYARIFPFETPFTVH	474
H.sapiens-beta3	.....	IIDWRSRIVPFITTSFLFNIV.	,MDSYARIFPFETPFTVH	473
H.sapiens-gamma1	.....		,IDSYSRIFPFETPFTVH	453
H.sapiens-gamma2	.....		,MDSYARIFPFETPFTVH	455
H.sapiens-gamma3	.....		,IDSYSRIFPFETPFTVH	455
R.norvegicus-alpha1	.....		,SKIDRMSRIVEPVLFGT	432
R.norvegicus-alpha2	.....		,SKIDRMSRIVEPVLFGT	484
R.norvegicus-alpha3	.....		,SKWDRISRIFPVLFGT	470
R.norvegicus-alpha4	TIG.....	VPGNVSATPP	,PSAPPSSGSGTISKIDCYSRILFPVAFAG	530
R.norvegicus-alpha5	.....		,SKIDRMSRIVEPVLFGT	441
R.norvegicus-alpha6	.....	SKVLSRTPFILPSTFVT	,PPLLPAIGGTSKIDCYSRILFPVAFAG	431
R.norvegicus-beta1	.....	IIDKWSRMFPIITTSFLFNIV.	,MDSYARIFPFETPFTVH	474
R.norvegicus-beta2	.....	IIDWRSRIFPFVVSFSFFNIV.	,MDSYARIFPFETPFTVH	474
R.norvegicus-beta3	.....	IIDWRSRIVPFITTSFLFNIV.	,MDSYARIFPFETPFTVH	473
R.norvegicus-gamma1	.....		,IDSYSRIFPFETPFTVH	453
R.norvegicus-gamma2	.....		,MDSYARIFPFETPFTVH	454
R.norvegicus-gamma3	.....		,IDSYSRIFPFETPFTVH	455
D.rerio-alpha1	.....		,SKIDRIRARIAFELLEFGT	435
D.rerio-alpha4	SSKFPLTSQSSTSSEGTSSFSRSLSPSSASGSNAJASSSSASKTIPFAPPSTIFTVFDLKPSRGITFAGGSAPLHRLGPKLKENKKAAQQPAAPATGGASKIDEYARLIFPVFSFGA	,GTSADKYSRILEPLAEGI	537	
D.rerio-alpha6	.....	EAPRERVFIPQLQSAFPNNMLA.	,MDSYARIFPFETPFTVH	519
D.rerio-beta2	.....	IIDKWSRIVPFITTSFLFNIV.	,IDSYSRIFPFETPFTVH	464
D.rerio-gamma2	.....	KDISKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	471
D.dominalia-RDL	.....	KDITKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	472
H.saltator-RDL	.....	REINURMCGISASD.	,IDKYSRIVPFVFCVFCNLIM.	481
L.striatella-RDL	.....	KCINUKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	470
A.mellifera-RDL	.....	KCINUKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	476
T.castaneum-RDL	.....	KCINUKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	476
C.felis-RDL	.....	KCINUKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	477
N.lugens-RDL	.....	KCINUKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	472
D.melanogaster-RDL	.....	KVKKQINKULIGITPSD.	,IDKYSRIVPFVFCVFCNLIM.	601
B.mori-RDL	.....	KGINKLLGTTFSD.	,IDKYSRIVPFVFCVFCNLIM.	489
B.mori-RDL3	.....	KDIGHKLGHTFSD.	,IDKYSRIVPFVFCVFCNLIM.	484
B.mori-RDL4	.....	KDISKLLGHTFSD.	,IDKYSRIVPFVFCVFCNLIM.	476
P.xylostella-RDL2	.....	KGINHKLLGTTFSD.	,IDKYSRIVPFVFCVFCNLIM.	514
P.xylostella-RDL1	.....	KDISKLLGHTFSD.	,IDKYSRIVPFVFCVFCNLIM.	479
A.funestus-RDL	.....	KCINUKLLGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	551
D.simulans-RDL	.....	KVVKQINKULIGITPSD.	,IDKYSRIVPFVFCVFCNLIM.	601
A.aegypti-RDL	.....	KDINUKLLGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	527
O.orizae-RDL	.....	KCINUKLYGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	469
M.domestica-RDL	.....	KVKKQINKULIGITPSD.	,IDKYSRIVPFVFCVFCNLIM.	570
S.furcifera-RDL	.....	KDINUKLLGITSFSD.	,IDKYSRIVPFVFCVFCNLIM.	473
N.vitripennis-RDL	.....	KCISHLKYACRSD.	,SACLTTFKPFKTHTLTGLTFS.	433
L.cuprina-RDL	.....	KVKKQINKULIGITPSD.	,IDKYSRIVPFVFCVFCNLIM.	545
S.litura-RDL1	.....	KDISKLLGHTFSD.	,IDKYSRIVPFVFCVFCNLIM.	479
S.litura-RDL2	.....	KGINKLLGTTFSD.	,IDKYSRIVPFVFCVFCNLIM.	493
T.cinnabarinus-RDL3	EPPTFTIKHSTGCKNCNPN.	,KLGCVSF.	,SCLDKYSRVEPVCFIC	703
T.cinnabarinus-RDL2	FGNQPPFTIPFPGPFCNP.	,RMLGCVSF.	,SCLDKYSRVEPVCFIC	503
T.cinnabarinus-RDL1	.....	,LGCVSF.	,SCLDKYSRVEPVCFVC	757
C.salei-RDL1	PS.	,TLCGCVTF.	,SCLDKYSRVEPVCFVC	456
C.suppressalis-RDL1	.....	KCISKLLGHTFSD.	,IDKYSRIVPFVFCVFCNLIM.	479
C.suppressalis-RDL2	.....	KGINKLLGTTFSD.	,IDKYSRIVPFVFCVFCNLIM.	490
Consensus	.....		
H.sapiens-alpha1	.....	MKRSFGLSDCILMAWILLSTLTGTSRY.	,GOFSLC.	56
H.sapiens-alpha2	.....	MKTKLNINYNQQFLVWDFPARIV.	,LAN ¹ GE.	56
H.sapiens-alpha3	.....	.MIITQTSCHYMTSILGILFLINILPCTTGTGCGESRCEFGFVCFDGGSLPK.	,DEAKNN.	56
H.sapiens-alpha4	.....	.MVSARKVFAITALSAGSVFALLRFLICLAVC.	,HADP1N.	81
H.sapiens-alpha5	.....	.MDNGMGSFGLIMKINLLCFCISMNLLSH.	,GFECSMITSVSKDETNNN.	62
H.sapiens-alpha6	.....	.MASSPWLCLIIW.	,LENAGLHL.	63
H.sapiens-beta2	.....	.MWTVQNRESLGLLSEFVPMITH.	,EVEGNYSENVSRILNLUGLDDRR.	46
H.sapiens-beta3	.....	.VCAAH..,SNTEPS.N.MS.	,JWKEVTR.LLK..,GIDR.	51
H.sapiens-gamma1	.....	.MNRVRKRGYFGIWFLIIAA..,VCAQ..,SNVDES.N.MS.	,LVKEVTR.LLK..,GIDR.	50
H.sapiens-gamma2	.....	.MSGSLLELLLEIWLISWTLGR.	,GSPE..,RSVNDFGN.MS.	51
H.sapiens-gamma3	.....	.MGEKLAEFLRSLRSRVEEYELDITVN.	,KIH..,EGDITQILNSLUGLDDRR.	78
R.norvegicus-alpha1	.....	MSSENINSTGGSVYSTFVFSQHMTWVLLILLSLYPGFTSOKSDDDYEVDYASN.	,T.JWVLTP.	80
R.norvegicus-alpha2	.....	.MAFKLILLLCLFSGLHSARSRKVEEYELDSSN.	,KSCW.	61
R.norvegicus-alpha3	.....	.MKRSRGLSDYLAWILLSTLGSRSY.	,GOFS.C..,DELKN.	55
R.norvegicus-alpha4	MTVKGKGRAGRMNIGFISIYLKWWVVESEGARTIILHSGKILMMNFETRMRKTHLSTCNWFELVWDFPARIV.	,LAN ¹ GE.	109	
R.norvegicus-alpha5	.....	.MITTQNMWHEVYTRVGULLLFLNILPCTTGTGCGESRCEFGFVCFDGGSLPK.	,DEAKNN.	81
R.norvegicus-alpha6	.....	.MVSVQKVFAIVLFLGGSVSLALLHVCLATC.	,HADP1N.	62
R.norvegicus-beta1	.....	.MDNGMHSRFLINTKLILVFCISMILTSF.	,SKDEKLCPENFRILSLLDLDDRR.	63
R.norvegicus-beta2	.....	.MILLLPFWLFLSLW.	,JITFTRILGGLDDRR.	46
R.norvegicus-beta3	.....	.MWTVQNRESLGLLSEFVPMVAH.	,JWKEVTR.LLK..,GIDR.	51
R.norvegicus-gamma1	.....	.MNRVRKRGYFGIWFLIIAA..,VCAQ..,SNVDES.N.MS.	,LVKEVTR.LLK..,GIDR.	50
R.norvegicus-gamma2	.....	.MSGFAGGRLRGLFISAFVFLIVAV.	,VCA..,QSVNDFGN.MS.	51
R.norvegicus-gamma3	.....	.MSGSGKVELFSSL.	,KIH..,EGDITQILNSLUGLDDRR.	78
R.norvegicus-gamma4	.....	MSSENINSTGTVVS.	,FVFSQHMTWVLLILLSLYPGFTSOKSDDDYEVDYASN.	79
R.norvegicus-gamma5	.....	.MAAKLILLLCLFSGLHSARSRKVEEYELDSSN.	,KSCW.	61
R.norvegicus-gamma6	.....	.MMWGRGAAMLWIMACLLVINALAGLAK.	,SSQNSQ.	56
R.norvegicus-beta1	.....	.MVSARKEMVTAMYFTSISTILYFLCVAAC.	,IJK1SGGI.	62
R.norvegicus-beta2	.....	.MALLAFLCLITVS.T.NLJGQ.	,DECKN.	41
R.norvegicus-beta3	.....	.MESIGKTFPHFLPFLIVAV.	,ACAO..,SIREPS.N.MP.	49
R.norvegicus-gamma1	.....	.MVMASLHFSSRCNLAMAFAVLFILWFLPSLVSQLESD..,	,KIN..,JITFTRILGGLDDRR.	80
R.norvegicus-gamma2	.....	.MRSLHAAWSMSFALLAATVALLPATHWA.	,FVY..,ESDVTWHLNSLUGLDDRR.	59
R.norvegicus-gamma3	.....	.MGSFHVAAWSMSFALLAATVALLPATHWA.	,FVY..,ESDVTWHLNSLUGLDDRR.	59
R.norvegicus-gamma4	.....	.MRAALAIWAVLTTFLRADFLP.	,FVL..,AGTGGGMSL.G.DV.	55
R.norvegicus-gamma5	.....	.MSFHAASWSFALLAATVALLPATHWA.	,FVQ..,AGTGGGMSL.G.DV.	58
R.norvegicus-gamma6	.....	.MGHSRVWPAVFLALALWFLASAGS.	,FGAGGSYL..,VNDV.	51
R.norvegicus-gamma7	.....	.MAALTRATFLGALLLALSPALLLWIL.	,FYADAAATGGGSMY.G.DV.	57
R.norvegicus-gamma8	.....	.MRLTFLAVLAVTTLFLRADFLP.	,FVLAGTGGGMSL.G.DV.	56
R.norvegicus-gamma9	.....	.MSELEFVPHVRCPSLGVLLILNALFLPOTINRTPFVY.	,FVLAGTGGGMSL.G.DV.	73
R.norvegicus-gamma10	.....	.MSDSRMKHLARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	51
R.norvegicus-gamma11	.....	.MHNTSRTGRVH..,AVVIGLAIWFLPHAD.	,HAAGT..,GGGGMF.G.DV.	59
R.norvegicus-gamma12	.....	.MSAVERHAA..,LLLAALATFLPCAN..	,RVAAG..,GGGGMF.G.DV.	59
R.norvegicus-gamma13	.....	.MSGKFRPTAF..,LLLAALATFLPCAN..	,RVAAG..,GGGGMF.G.DV.	54
R.norvegicus-gamma14	.....	.MGRGRGRRGVPGAAVILALAVACLPFHAD.	,HAAAG..,GGGGMF.G.DV.	57
R.norvegicus-gamma15	.....	.MSGVGPGAS..,LLLILITAAFLPHGN..	,HVAAG..,GGGGMF.G.DV.	54
R.norvegicus-gamma16	.....	.MSLTLIEVPHAKSFSLGVLLILNALFLPOTINRTPFVY.	,L.G.DV.	68
R.norvegicus-gamma17	.....	.MSDSRMKHLARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	73
R.norvegicus-gamma18	.....	.MHTSRMKTQARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	51
R.norvegicus-gamma19	.....	.MGHSRVWPFVFLVILVILWLNWAG..,FGNVGNM..,....D.V.	,NISAILDS.FSV..,GIDR.	71
R.norvegicus-gamma20	.....	.MSDS..MLYCTQLCFLPSRLITLWILALFLAMLICEFRRHAA..,TVNAATAAGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	56
R.norvegicus-gamma21	.....	.MSRALAIWLVAVTTLRFLADFLP..,FVHAGTGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	20
R.norvegicus-gamma22	.....	.MSDS..MLYRKFDITMERSRLLITLWILALFLMLOEFKKQIT..,TVNAATAAGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	71
R.norvegicus-gamma23	.....	.MSGARFRSAP..,LLLAALAAFLPCAN..,HVAAG..,GGGGMF.G.DV.	,NISAILDS.FSV..,GIDR.	54
R.norvegicus-gamma24	.....	.MHTCRPRGVHSIAIVLALAIWFLPHAD..,HAAAG..,GGGGMF.G.DV.	,NISAILDS.LSV..,GIDR.	57
R.norvegicus-gamma25	.....	.MSLLEFVPHVRCPSLGVLLILNALFLPOTINRTPFVY.	,MINLNQWIFVLLVILVFNRFNHFITLSD..,F.DVGERG..,NALQONITRILNAFFAG..,GIDR.	68
R.norvegicus-gamma26	.....	.MHTSRMKTQARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	57
R.norvegicus-gamma27	.....	.MHTSRMKTQARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	59
R.norvegicus-gamma28	.....	.MHTSRMKTQARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	72
R.norvegicus-gamma29	.....	.MHTSRMKTQARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	52
R.norvegicus-gamma30	.....	.MHTSRMKTQARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.FSV..,GIDR.	54
R.norvegicus-gamma31	.....	.MHTSRMKTQARNAFLPFLTILWILAINALLAACTGKRIIHTVQATGGGMSL.G.DV.	,NISAILDS.LSV..,GIDR.	57
Consensus	.....			yd

H.sapiens-alpha1	FNLVWVATILNREPGLKAPTHQ...	456
H.sapiens-alpha2	FNLVWVATILNREPFLVGSP....	451
H.sapiens-alpha3	FNLVWVATILNRESAIKGHIR...	491
H.sapiens-alpha4	FNLVWVWVILSRKTNERSESM...	554
H.sapiens-alphas	FNLVWVATILNREPFLVGASPR...	462
H.sapiens-beta6	FNLVWVWVILSRKTNEVSSVE...	453
H.sapiens-beta1	.....	474
H.sapiens-beta2	.....	474
H.sapiens-beta3	.....	473
H.sapiens-gamma1	FNLVWVWVGVYLNL.....	465
H.sapiens-gamma2	FNLVWVWVSVYLNL.....	467
H.sapiens-gamma3	FNLVWVWVGVYLNL.....	467
R.norvegicus-alpha1	FNLVWVATILNREPGLKAPTHQ...	455
R.norvegicus-alpha2	FNLVWVATILNREPFLVGSP...	504
R.norvegicus-alpha3	FNLVWVATILNRESAIKGHIR...	493
R.norvegicus-alpha4	FNLVWVWVWVULSKTNERSESM...	552
R.norvegicus-alpha5	FNLVWVATILNREPFLVGASPR...	464
R.norvegicus-alpha6	FNLVWVWVILSRKTNEVSSVE...	453
R.norvegicus-beta1	.....	474
R.norvegicus-beta2	.....	474
R.norvegicus-beta3	.....	473
R.norvegicus-gamma1	FNLVWVWVGVYLNL.....	465
R.norvegicus-gamma2	FNLVWVWVSVYLNL.....	466
R.norvegicus-gamma3	FNLVWVWVGVYLNL.....	467
D.reio-alpha1	FNLVWVATILNKKFPLGGNNIQLH...	459
D.reio-alpha4	FNNVWVWVUVLSKTNEARKGA...	557
D.reio-alpha6	FNLVWVWVYILSKDTLEHLRDIE...	395
D.reio-beta2	.....	519
D.reio-gamma2	FNUVWVFSVYLNL.....	476
P.dominula-RDL	LLKEAK.....	477
H.saltator-RDL	LLKEAK.....	478
L.striatella-RDL	MLEFKK.....	487
A.mellifera-RDL	LLKEAK.....	476
T.castaneum-RDL	LLKEEK.....	482
C.felis-RDL	LLGEKK.....	483
N.lugens-RDL	LLKEEK.....	478
D.melanogaster-RDL	LLGEE.....	606
B.mori-RDL2	LLGEEN.....	495
B.mori-RDL3	LLEDK.....	489
B.mori-RDL1	LLGEOK.....	482
P.xylostella-RDL2	LLGDIN.....	520
P.xylostella-RDL1	LLKEEK.....	485
A.funestus-RDL	LLGEKK.....	557
D.simulans-RDL	LLGEE.....	606
A.aegypti-RDL	LLGEER.....	533
O.orizae-RDL	LLEVVK.....	475
M.domestica-RDL	LLGEER.....	576
S.furcifera-RDL	LLKEEK.....	479
N.vitripennis-RDL	FNLMYWIYVLHISDVVADDLVILLEA	459
L.cuprina-RDL	LLGEE.....	550
S.litura-RDL1	LLKEEK.....	485
S.litura-RDL2	LLGEEN.....	499
T.cinnabarinus-RDL3	FNLMYWIYVLHISNEFNPFLLIGLS...	728
T.cinnabarinus-RDL2	FNLMYWIYVLHISASSSPN....LGGS...	522
T.cinnabarinus-RDL1	FNLMYWIYFLHISSSLPGADEES...	781
C.salei-RDL	FNLMYWIYVLHISDV...LVEVQEN	478
C.suppressalis-RDL1	LLKEEK.....	485
C.suppressalis-RDL2	LLGEEN.....	496
Consensus		