

MOTIFS		-----L-----		-----PSTD--	
ST8Sia IV					
Hsa	L41680	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Ptr	AJ697661	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Mac	XP1097339	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Cfa	XP546003	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Ssc	AZ413382	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Bta	AJ699421	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Rno	AM419015	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Mmu	X86000	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Mau	AJ245701	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Cgr	Z46801	CAVVGNSGILLDSECGE	KIDS HN FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDRAK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Aca	AM503581	CAVVGNSGILLDSECGE	KIDS HE FVIRCNLAPVFEAADVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Str	AM419014	CAVVGNSGILLNSGCGE	KIDS HD FVIRCNLAPVFEAAHVGT	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Gga	AF008194	CAVVGNSGILLDSECGE	KIDS HD FVIRCNLAPVFEAADVGN	KSDFTIMNPSVVQRAFGGFRN	SDREK FV HLRSLMNSVLWIPAFMVKGGEKHVEWVNALILK NKL KVRTAYPS
Omy	AB094402	CAVVGNSGVLLNSGCGE	KIDS HD FVIRCNLPPELSEFADVGT	RSDFITMNPSPVIQRVYGGKLNAT	TERFVQRLGLNSVLWIPAFMVKGGEHVESVNELIVK RL KLVRTAYPS
Dre	AJ715545	CAVVGNSGILLKSGCGE	KIDN SH FVIRCNLAPESGFADVGT	RSDFITMNPSPVIQRVYGGKREET	QENTLQRLGLNSVLWIPAFMVKGGMKHVDVTNELILK KL KLVRTAYPS
Pma	AM900682	CAVVGNSGILLEGACGE	BIDQ HD FVIRCNLAPVGYE	DVGS RV SDFTMNPSPVVERTY	GGRLTKAHDHFRGRRRLALNSSLILWIPAFMVKGGEQHVIVNNLLITLGLPLRAA

ST8Sia IV/II											
Bfl-16	AM901546	CAVVGNSGILLGSGCGE	BIDSHD	FVIRCNLAPVTEY	VDVGRKSD	IVTMNPSVLPTAFGGGLKEKH	EEKFVKRLRLMHSMLWIPAF	TINGE	SKYVQYTNRIILK	NDLN	IKITLYPT
Bfl-20	AM901547	CAVVGNSGILLPNSGCGE	RIDT HD	FVPRCNLPEL	BGHERDVG	KSNFTIMNPSPVMFTTYK	DDAEPLKKEFIRLRLR	LEGILFIPAFVAKSE	KEHHQVQWNTD	ILIKHNINVRTAYS	
Bfl-6	EF140745	CAVVGNSGILLHSGCGE	RIDT HD	FVPRCNLPEL	BGYEDVG	KSNFTIMNPSPVILTYTK	DDVEPKLKEFIRLRLR	LEGILFIPAFVATWEN	EHQVQWNTD	IIVEHNINVRTAYS	
Bfl-14	AM901544	CAVVGNSGILLHSGCGE	RIDT HD	FVPRCNLPEL	BGYEDVG	KSNFTIMNPSPVILTYTK	DDVEPKLKEFIRLRLR	LEGILFIPAFVATWEN	EHQVQWNTD	IIVEHNINVRTAYS	
Bfl-15	AM901545	CAVVGNSGILLNSGCGE	RIDT HD	FVPRCNLPEL	BGYEDVG	KSNFTIMNPSPVILTYTK	DDVEPKLKEFIRLRLR	LEGILFIPAFVATWEN	EHQVQWNTD	IIVEHNINVRTAYS	

ST8Sia II									
Dre	AY055462	CAIVGNSGILLNSSCGE	RIDS HD	FVIRCNLAPVEY	ADVGR TS	ITMNPSPVVQRAFD	DLN SE EEVQRFVRLRQLSLS	SVLWIPAFMAKGGEERVEWAIRLIL L TVNVRTAPFS	
Tni	AJ715537	CAIVGNSGVLLNSSCGPE	RIDS HD	FVIRCNLAPVEY	DHNDVGRWRTNI	VTMNPSPVVQRAFD	LSLSEEWDRDRFLRLQLSLS	SILWIPAFMAKGGEERVEWTLRLIL L TVNVRTAPFS	
Tru	AJ715538	CAIVGNSGILLNSSCGE	RIDS HD	FVIRCNLAPVEY	YDVGWGRSDFT	ITMNPSPVVQRAFD	LSLSEEWDRDRFLRLQLSLS	SVLWIPAFMAKGGEERVEWTLRLIL L TVNVRTAPFS	
OmyA	AB262976	CAIVGNSGILLNSSCGE	RIDS HD	FVIRCNLAPVEY	ADVGDRGTNI	VTMNPSPVVQRAFD	LSLSEEWRRERFLRLQLSLS	SVLWIPAFMAKGGEERVEWAIRLIL L TVNVRTAPFS	
Gac	AM422139	CAIVGNSGILLNSSCGE	RIDS HD	FVIRCNLAPVEY	SDVGRGTNI	VTMNPSPVVQRAFD	DLN SE EDRDRFLRLQLSLS	SVLWIPAFMAKGGEERVEWAIRLIL L TVNVRTAPFS	
Ola	AM422134	CAIVGNSGILLNSSCGE	RIDS HD	FVIRCNLAPVEY	SDQVGRGTNI	VTMNPSPVVQRAFD	DLN SE EEQRRERFLRLQLSLS	SVLWIPAFMAKGGEERVEWAIRLIL L TVNVRTAPFS	
OmyB	AB262977	CAIVGNSGILLNSSCGE	RIDS HD	FVIRCNLAPVEY	ADVGDRGTNI	VTMNPSPVVQRAFD	LSLSEEWRRERFLRLQLSLS	SVLWIPAFMAKGGEERVEWAIRLIL L TVNVRTAPFS	
Str	BC121420	CAIVGNSGILLNSGCGE	RIDS HD	FVIRCNLAPVEY	ADVGT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMAKGGEERVEWNLIIK HH INVTAYPS
Xla	AB007468	CAIVGNSGILLNSGCGE	RIDS HD	FVIRCNLAPVEY	ADVGT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMAKGGEERVEWNLIIK HH INVTAYPS
Aca	AM503579	CAIVGNSGILLNSGCGE	RIDS HD	FVIRCNLAPVEY	SDVGR	KMDIVT	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMAKGGEERVEWNLIIK HH INVTAYPS
Gga	AJ699419	CAIVGNSGVLLNSGCGE	PIDT HS	FVIRCNLAPVEY	ADVGRT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMAKGGEERVEWNLIIK HH INVTAYPS
Rno	L13445	CAIVGNSGVLLNSGCGE	PIDT HS	FVIRCNLAPVEY	ADVGRT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMARGGGERVEWNLIIK HH INVTAYPS
Mmu	X83562	CAIVGNSGVLLNSGCGE	PIDT HS	FVIRCNLAPVEY	ADVGRT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMARGGGERVEWNLIIK HH INVTAYPS
Cfa	AM422132	CAIVGNSGVLLNSGCGE	PIDT HS	FVIRCNLAPVEY	ADVGRT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMARGGGERVEWNLIIK HH INVTAYPS
Bta	AM422133	CAIVGNSGVLLNSGCGE	PIDT HS	FVIRCNLAPVEY	ADVGRT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMARGGGERVEWNLIIK HH INVTAYPS
Ptr	AJ697659	CAIVGNSGVLLNSGCGE	RIDS HD	FVIRCNLAPVEY	ADVGRT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMARGGGERVEWNLIIK HH INVTAYPS
Hsa	U33551	CAIVGNSGVLLNSGCGE	RIDS HD	FVIRCNLAPVEY	ADVGRT	KTNI	VTMNPSPVQRAFD	VNDTKDKFLRLQLSLS	SILWIPAFMARGGGERVEWNLIIK HH INVTAYPS

MOTIFS		--PSTD-----				-----S-----				III-				--VS--				--Cterm--				IV II tot		%	%
ST8Sia IV																									
Hsa	L41680	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Ptr	AJ697661	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Mac	XP1097339	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Cfa	XP546003	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Ssc	AZ413382	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Bta	AJ699421	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Rno	AM419015	LRLIHAVRGYWLTKNV	IKRPTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Mmu	X86000	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Mau	AJ245701	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Cgr	Z46801	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDLN	GKAVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	39	0	39	100	0							
Aca	AM503581	LRLIHAVRGYWLTKNV	IKRPTGLLMTLATR	FCDEI	ILYLGFWPPP	RDING	TVKYHYDD	DLKYRYFSN	ASPHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	37	0	37	100	0							
Str	AM419014	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDV	GNV	KYHYDD	DLKYRYFSN	AGHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	36	1	37	97	3						
Gga	AF008194	LRLIHAVRGYWLTKNV	PIKRPSTGLLMTLATR	FCDEI	ILYLGFWPPP	KDL	HQ	KYHYDD	DLKYRYFSN	AGHRMPLEF	FTKLNV	LHNH	GALKIT	TTGK	35	2	37	95	5						
Omy	AB094402	LRLIHVRGYWLTKIN	IKRPTGLLMTLATR	FCDEI	ILYLGFWPPP	RDANG	MV	KYHYDD	DLKYRYFSN	AGHRMPLEF	FTKLNV	LHNS	GALKIT	TTSC	24	8	36	67	33						
Dre	AJ715545	LRLIHAVRGFWLTKIN	IKRPTGLLMTLATR	FCDEI	ILYLGFWPPP	DA	SNGP	VYHYDD	DLKYRYFSN	AGHRMPLEF	FTKLNV	LHNS	GALKIT	TTSC	20	12	32	63	37						
Pma	AM900682	LRLMHAVRGYWLTKNV	IKRPTGLLMTLATR	FCREI	ILYLGFWPPQ	NTA	AGP	VYHY	YEG	LYRY	YRS	RAGPH	TMPLYE	ITL	18	11	29	62	38						

Bfl-16	AM901546	KHLAHSIRGFWLQAKT	RIKRPSTGLYMTLATR	FCQEI	ILYLGFFPPT	VDV	NGREVRKYHYDD	NKGYFNFD	KRRPHSPVPEFO	ALRRHLD	GKALRLL	TDK			18	12
Bfl-20	AM901547	PMDEKWITGYWKTSEY	VARPSSGMMWYTF	AAVSLCDE	VHLYGYMPD	DRY	GRNVIKYHYDD	PPRPFAT	MYGG--	HDMPIEFQVFKSL	HEKAGALRLO	DDK			14	14
Bfl-6	EF140745	PMDEKWITGYWKTSEY	VARPSSGMMWYTF	AAVSLCDE	VHLYGYMPD	DRY	GRNVIKYHYDD	PPRPFAT	MYGG--	HDMPIEFQVFKSL	HEKAGALRLO	DDK			13	17
Bfl-14	AM901544	PMDEKWITGYWKTSEY	VARPSSGMMWYTF	AAVSLCDE	VHLYGYMPD	DRY	GRNVIKYHYDD	PPRPFAT	MYGG--	HDMPIEFQVFKSL	HEKAGALRLO	DDK			13	17
Bfl-15	AM901545	PMDEKWIAID-WKSTSEY	VARPSSGMMWYTF	AAVSLCDE	VHLYGYMPD	DRY	GRNVIKYHYDD	PPRPFAT	MYGG--	HDMPIEFQVFKSL	HEKAGALRLO	DDK			18	31

ST8Sia II																			
Dre	AY055462	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CEETH	LYLGFWPPA	DDP	GKPKV	KYHYDD	DLTYEY	SSASPHM	MPLEFRTLS	ALHRH	GALRLH	TG	12	18	30	40	60
Tni	AJ715537	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CEETH	LYLGFWPPSD	DPGR	KV	KYHYDD	DLKYEY	SSSSPHM	MPLEFRTLS	ALHRH	GALRLH	TG	9	19	28	32	68
Tru	AJ715538	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CEETH	LYLGFWPPSD	DPGR	KV	KYHYDD	DLKYEY	SSSSPHM	MPLEFRTLS	ALHRH	GALQLH	TG	9	19	28	32	68
OmyA	AB262976	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CEETH	LYLGFWPPQDS	GKPKV	KYHYDD	DLTYEY	SSASPHM	MPLEFRTLS	ALHRH	GALRLH	TG	GSC	8	18	26	31	69
Gac	AM422139	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CEETH	LYLGFWPPR	DDG	GRK	KYHYDD	DALKYEY	SSSSPHM	MPLEFRTLS	ALHRH	GALRLH	TG	9	21	30	70	70
Ola	AM422134	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CEETH	LYLGFWPPF	DDSH	GKPKV	KYHYDD	DLKYEY	SSSSPHM	MPLEFRTLS	ALHRH	GALRLH	TG	9	21	30	70	70
OmyB	AB262977	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CEETH	LYLGFWPPQDS	GKPKV	KYHYDD	DLTYEY	SSASPHM	MPLEFRTLS	ALHRH	GALRLH	TG	GSC	8	20	28	29	71
Str	BC121420	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQAGHAM	PLEFKALN	HLH	GALKIN	WG	8	28	36	22	78
Xla	AB007468	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQAGHAM	PLEFKALN	HLH	GALKIN	WG	8	29	37	22	78
Aca	AM503579	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	3	32	35	9	91
Gga	AJ699419	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	1	35	36	3	97
Rno	L13445	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	1	37	38	3	97
Mmu	X83562	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	1	37	38	3	97
Cfa	AM422132	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	0	39	39	0	100
Bta	AM422133	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	0	39	39	0	100
Ptr	AJ697659	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CNRI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	0	39	39	0	100
Hsa	U33551	LRLIHAVRGYWLNNV	IKRPTTGLLMTYATRF	CKQI	LYLGFWPPPR	DDL	HONPKV	KYHYDD	DLKYEY	SQASPHM	MPLEFKALN	HLH	GALKIN	WG	0	39	39	0	100