

$\alpha 3$ $\beta 6$ $\beta 7$ $\beta 8$ TT
 TSWV 150 160 170 180 190

TSWV	QEKD	TIF	NDRY	TEAVN	KG	SLSCV	KEHAYK	T	EMCYNL	AL	GKVN	.....	VL	SPNR																										
BeNMV	NNDD	IEI	KNET	INALP	SM	NMIHL	KEHAYK	I	TKSPNC	FE	GKRN	.....	MLR	RG																										
CCSV	KLKG	LP	FGWY	VDECK	KH	DFYIS	NSGDIS	L	DYGF	FP	VMGKT	.....	T	SYWRE																										
CACV	RSND	LLP	SDWC	LDEFW	KNN	NFYIA	TNGEFS	L	DYGF	FS	VMGKT	.....	T	SYWRE																										
CSNV	QEKD	TIF	NDRY	IEAAN	KG	SLSCV	KESTYE	V	KMCHNQ	AL	GKVN	.....	VL	SPNR																										
GBNV	RSNG	LLP	SGWY	QDECC	KNN	NFYIA	TNGDLT	L	DYGF	FS	VMGKT	.....	T	SYWRE																										
GCFSV	YKFV	YNP	GMLG	LESETN	T	VIF	FVEKLG	L	PAH	AS	AF	GNNFDR	CHFSGSSVP	.....																										
GRSV	QEED	I	IPDDKY	I	SAAN	KG	SLSCV	KEHTYK	V	EMSYNQ	AL	GKVN	VL	SPNR																										
GYSV	YNFL	YNP	KILN	IE	ETSS	T	ILFP	VEQIGT	L	PST	IS	V	CR	YFDKNHFSVVDAN																										
HCRV	SPED	I	YSDWF	I	NEAK	KKN	NFYIA	DISGFS	M	DWG	FS	VMGRT	T	SYWKE																										
INSV	KESD	I	FPNNF	I	EAN	KG	SLSCV	KEVLFV	V	KYSNNO	SM	GKVS	VL	SPTR																										
IYSV	SKED	I	YNEWF	V	EAK	RKN	NFFIA	ADVSGFS	L	DYGF	FS	VMGKT	T	SYWKE																										
LNRV	SPEAF	LP	SFHT	I	NEAL	KSN	NVITL	DT	TECFAL	D	GRKVG	YI	CTYNG	RK	VVS																									
MSMV	KETD	I	V	EDRF	I	AAAN	RG	SLSCV	KEIMYE	T	KTSNNQ	AY	GKVN	VL	SPNR																									
MYSV	TSED	F	HPQGW	C	IEECK	KNN	RFTVA	ETSCL	E	LN	YG	SP	VMGKT	V	AYWRE																									
MVBaV	KPNG	L	GP	AEWY	L	E	ECKRNN	NFYIA	S	NGDVT	D	YGF	FS	VMGKT	T	SYWRE																								
PCSV	KNYC	L	APNAW	I	E	L	CLRSN	NFFIA	S	ASGDYK	E	Y	VMGKT	V	SYWRE																									
PNSV	QEKD	TIF	DDRY	IEAAN	KG	SLSCV	KEHVYK	V	EMCENQ	AL	GKVN	.....	VL	SPNR																										
PhySMV	TSED	F	HPQGW	C	IEECK	KNN	RFTVA	ETSCL	E	LN	YG	SP	VMGKT	V	AYWRE																									
PolRSV	AKED	I	Y	RDWF	I	NEAE	RK	TFFMA	D	IAGFS	L	DYGF	FS	VMGKT	T	SYWRE																								
SVNaV	CAED	I	V	DDEL	T	G	LLP	SMN	I	TH	KEDSYK	I	TKSNNC	FE	GKRN	M	M																							
TNRSV	KTNT	L	TP	SAWA	T	E	L	CIRNN	N	FFIS	M	G	GNYR	L	E	Y	VMGKT	V	SYWRE																					
TYRV	SKDD	MY	P	SEWF	I	NEAR	RKN	NFFIA	D	VSGFN	L	DYGF	FS	VMGKT	T	SYWKE																								
TZSV	KPKG	M	TP	FDWY	I	NECK	KY	DFYIS	D	NGDIS	L	DYGF	FP	VMGKT	T	SYWRE																								
WBNV	RP	I	G	M	T	P	SGWC	L	DECR	RNN	NFYIA	A	ANGELAL	D	YGF	FS	VMGKT	T	SYWRE																					
WSMoV	ASSG	L	LP	SRWC	L	DECY	KSN	NFYIA	T	NGDLT	L	DYGF	FS	VMGRT	T	SYWRE																								
ZLCV	KEED	I	T	K	DRY	I	E	AAN	R	G	S	L	S	C	V	K	E	Q	T	Y	E	V	K	V	C	H	N	Q	A	L	G	K	V	N	V	L	S	P	N	R

$\beta 9$ $\beta 10$ TT
 TSWV 200 210 220 230

TSWV	NV	H	E	W	L	Y	S	F	K	P	N	F	N	Q	V	E	S	N	N	R	T	V	N	S	L	A	V	K	S	L	L	M	S	A	E	N	N	I	M	P	N	S	Q	A	F			
BeNMV	W	I	G	T	G	V	V	N	I	H	P	I	G	Y	V	L	P	K	A	T	N	R	C	L	G	T	L	S	L	K	S	M	E	S	T	V	E	K	G	V	L	S	S	D	I				
CCSV	N	L	P	R	E	K	I	I	S	V	K	Q	K	C	V	P	N	V	S	A	L	T	N	R	I	L	P	L	T	V	K	A	I	Q	I	A	S	E	L	A	S	E	K	T	V	V	
CACV	N	I	S	R	E	K	I	L	S	F	K	H	K	S	L	P	D	N	T	V	P	T	N	R	L	S	T	S	I	V	K	G	I	Q	L	G	S	E	L	A	P	E	T	T	V	I	
CSNV	NV	H	E	W	L	Y	S	F	K	P	N	F	N	Q	V	E	S	N	N	R	T	V	N	S	L	A	V	K	S	L	L	L	S	A	E	N	N	I	M	P	N	S	Q	A	F			
GBNV	S	I	S	R	E	K	I	L	S	V	K	Q	K	C	L	P	D	N	T	V	P	T	N	R	L	S	T	S	T	V	K	G	I	Q	L	G	S	E	L	A	P	D	T	T	V	I	
GCFSV	G	F	M	T	V	K	A	V	S	E	S	S	K	R	T	Q	E	K	A	H	Q	L	H	N	K	S	L	K	A	L	E	I	V	S	N	S	D	F	R	S	T	Y	I	K	T	T			
GRSV	NV	H	E	W	L	Y	S	F	K	P	N	F	N	Q	V	E	S	N	N	R	T	V	N	S	L	A	V	K	S	L	L	M	A	T	E	N	N	I	M	P	N	S	Q	A	F			
GYSV	K	Y	M	S	V	K	A	V	S	D	G	A	K	Y	S	N	Q	S	H	R	Q	L	H	N	K	N	L	K	A	I	E	I	A	S	V	S	G	I	M	P	N	T	I	S	K	T			
HCRV	N	M	E	K	T	S	L	V	S	V	K	Q	K	S	A	A	F	P	S	V	P	T	N	R	V	L	S	V	S	T	I	K	A	V	E	I	V	S	K	I	A	C	D	K	S	T	I
INSV	SV	H	E	W	L	Y	T	L	K	P	V	F	N	Q	S	Q	T	N	N	R	T	V	N	T	L	A	V	K	S	L	A	M	S	A	T	S	D	L	M	S	D	T	H	S	F			
IYSV	N	M	D	K	T	S	L	I	S	V	K	Q	K	S	M	N	N	P	S	V	P	T	N	R	L	S	A	S	T	I	K	A	I	E	I	A	S	N	I	A	C	N	K	S	T	V	
LNRV	S	Q	G	F	Y	M	A	S	V	K	P	I	S	A	V	S	K	G	K	N	S	N	R	L	S	A	H	L	K	S	V	E	D	F	C	E	M	G	C	T	H	T	Q	V			
MSMV	NS	N	E	W	I	Y	T	V	K	P	M	F	N	Q	T	E	T	N	N	R	T	V	N	S	L	A	I	K	S	L	L	L	S	A	V	N	D	I	S	P	O	S	Q	V	F			
MYSV	N	I	S	G	E	K	L	V	T	V	K	P	K	C	I	N	V	P	T	A	L	P	N	R	L	L	P	S	S	T	V	K	A	I	Q	I	G	S	E	L	A	K	A	T	V	V	
MVBaV	N	I	S	R	E	K	I	L	S	V	K	Q	K	S	L	S	D	S	T	V	P	S	N	R	L	S	T	S	T	I	R	A	I	Q	L	G	S	D	L	A	P	E	N	S	T	I	
PCSV	N	L	P	K	G	K	M	L	S	I	K	Q	K	V	A	Q	G	T	S	R	L	T	N	R	V	L	S	P	S	A	A	R	A	I	Q	I	A	A	E	I	V	Q	N	E	N	T	I
PNSV	NV	H	E	W	L	Y	S	F	K	P	I	F	N	Q	V	E	S	N	N	R	T	V	N	S	L	A	V	K	S	L	L	M	S	A	E	N	N	I	M	P	N	S	Q	A	F		
PhySMV	N	I	S	G	E	K	L	V	T	V	K	P	K	C	I	N	V	P	T	A	L	P	N	R	L	L	P	L	S	T	V	K	A	I	Q	I	G	S	E	L	A	K	A	T	V	V	
PolRSV	N	L	E	K	T	S	L	I	S	I	K	Q	K	S	A	G	N	P	V	V	P	T	N	R	L	S	A	G	T	I	K	A	V	E	I	A	S	A	I	A	S	D	K	T	T	I	
SVNaV	W	I	G	T	G	N	V	T	S	I	H	P	V	G	Y	S	M	P	A	S	T	N	R	C	I	G	T	L	A	L	K	S	L	E	S	T	A	K	K	G	I	R	S	T	D	I			
TNRSV	N	L	Q	K	E	K	M	L	S	V	K	Q	K	V	I	Q	G	T	S	R	L	T	N	R	V	L	S	P	S	A	V	K	A	I	Q	I	A	S	E	L	V	Q	S	E	T	T	I
TYRV	N	M	D	K	T	S	L	I	S	V	K	Q	K	S	M	N	N	P	L	V	P	T	N	R	L	S	A	S	T	I	K	A	I	E	I	A	S	N	I	A	C	N	K	S	T	V	
TZSV	N	I	P	R	E	K	I	L	S	V	K	Q	K	C	L	P	N	T	S	A	L	T	N	R	I	L	S	L	S	T	V	R	A	I	Q	I	A	S	E	L	A	S	E	K	T	V	V
WBNV	N	M	S	R	E	K	I	L	S	V	K	Q	K	S	L	P	D	N	T	V	P	T	N	R	L	S	T	S	T	V	K	G	I	Q	L	G	S	E	L	A	S	D	T	T	V	I	
WSMoV	S	M	S	R	E	K	I	L	S	V	K	Q	K	C	F	S	D	N	T	V	P	T	N	R	L	S	T	S	T	V	K	G	I	Q	L	G	S	E	L	A	S	D	T	T	V	I	
ZLCV	NV	H	E	C	L	Y	S	F	K	P	N	F	N	Q	V	E	S	N	N	R	T	V	N	S	L	A	I	K	S	L	L	M	S	V	K	N	E	I	M	P	N	S	Q	A	F			

$\eta 2$ $\beta 11$ $\eta 3$ TT $\beta 12$
 TSWV 240 250 260 270 280 290

TSWV	V	K	A	S	T	D	S	H	F	K	L	S	L	W	L	R	V	P	K	.	V	L	K	Q	I	S	I	O	R	L	F	K	V	A	G	D	E	T	N	.	K	T	F	Y	L	S	I	A	C	I	P	N	H	N	S	V
BeNMV	A	H	A	E	L	S	L	G	G	K	C	N	F	H	L	F	S	S	C	K	G	D	L	G	D	V	S	F	M	R	N	V	K	F	F	E	D	K	H	E	R	V	F	T	I	Y	V	K	T	S	S	D	I	N	N
CCSV	L	A	S	R	Q	R	L	D	I	D	V	K	S	Q	Y	R	V	S	F	P	G	I	Q	D	E	G	A	F	T	R	T	F	C	I	P	M	D	N	T	A	R	I	C	F	Y	A	K	T	S	V	D	S	N		
CACV	L	S	C	K	Q	N	L	D	I	D	L	K	S	Q	Y	R	I	S	F	H	G	I	Q	E	E	G	A	F	T	R	T	F	C	I	P	F	E	N	K	S	R	I	C	F	Y	A	K	T	V	A	D	N	S	N	
CSNV	V	K	A	S	T	D	S	H	F	K	L	T	L	W	L	R	I	P	K	.	V	L	K	Q	I	S	S	O	R	L	F	K	I	A	G	D	E	T	N	.	K	E	F	Y	S	I	A	C	I	P	N	H	N	S	V	
GBNV	L	S	L	K	Q	N	L	N	V	D	L	K	S	Q	Y	R	V	.....	S	F	H	G	I	Q	E	E	G	A	F	A	R	T																										

<i>TSWV</i>	▶TTT	β22	450	β23	460
<i>TSWV</i>					
<i>BeNMV</i>					
<i>CCSV</i>					
<i>CACV</i>					
<i>CSNV</i>					
<i>GBNV</i>					
<i>GCFSV</i>					
<i>GRSV</i>					
<i>GYSV</i>					
<i>HCRV</i>					
<i>INSV</i>					
<i>IYSV</i>					
<i>INRV</i>					
<i>MSMV</i>					
<i>MYSV</i>					
<i>MVBaV</i>					
<i>PCSV</i>					
<i>PNSV</i>					
<i>PhySMV</i>					
<i>PolRSV</i>					
<i>SVNaV</i>					
<i>TNRSV</i>					
<i>TYRV</i>					
<i>TZSV</i>					
<i>WBNV</i>					
<i>WSMoV</i>					
<i>ZLCV</i>					