

			Ser158	
	spinach.seq	LSEGERGDTVADMLFASESTKGRMRRISSVEMMDNWANTF	169	
FamilyB	NtSPS5	LSEGEKGDVLTGETPTI.DSPRKRFQR..NFSNLEVWSDNN	163	
	NtSPS6	LSEGEKGDVLTGETPTI.DSPRKRFQR..NFSNLEVWSDNN	163	
	NtSPS1	LSEGEKGDVVSDIPSHGESTKGRLPRISSVETMEAWVNQQ	161	
FamilyA	NtSPS2	LSEGEKGDVSDMPSHGESTKGRLPRISSVETMEAWVNQQ	161	
	NtSPS3	LSDGEKVDMVGDLSAHGDSVRGRMSRVSSVDAMANWANQY	143	
	NtSPS4	LSDGEKVDMVGDLSAHGDSVRGRMS.....	142	
FamilyC	NtSPS7	LSEGEKEKTDNVNTSDSHHVISRIN.....SVTQMWPDED	191	
	NtSPS8	LSEGEKEKTD.VNTSDSHHVISRIN.....SVTQMWPDED	188	
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	NtSPS5	V	D	L	F	T	R	Q	I	A	S	P	E	V	D	W	S	Y	G	E	P	T	E	M	L	I	N	T	G	P	E	D	G	D	D	T	D	L	G	E	S	S		254																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	NtSPS6	V	D	L	F	T	R	Q	I	A	S	P	E	V	D	W	S	Y	G	E	P	T	E	M	L	I	N	T	G	P	E	D	G	D	D	A	D	L	G	E	S	S		254																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
FamilyA	NtSPS1	V	D	L	L	T	R	Q	V	S	S	P	E	V	D	W	S	Y	G	E	P	T	E	M	L	P	P	R	S	T	E	G	L	M	T	E	M	G	E	S	S		252																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	NtSPS2	V	D	L	L	T	R	Q	V	S	S	P	E	V	D	W	S	Y	G	E	P	T	E	M	L	P	P	R	S	T	E	G	M	M	T	E	M	G	E	S	S		252																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	NtSPS3	V	D	L	L	T	R	Q	V	S	A	P	D	V	D	W	T	Y	G	E	P	T	E	M	L	N	L	I	D	S	S	D	T	M	H	E	V	G	E	S	G		263																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	NtSPS4	V	D	L	L	T	R	Q	V	S	A	P	D	V	D	W	T	Y	G	E	P	T	E	M	L	N	L	I	D	S	S	D	T	M	H	E	V	G	E	S	G		228																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
FamilyC	NtSPS7	V	D	L	L	T	R	Q	I	T	S	P	E	V	D	S	S	Y	G	E	P	I	E	M	L	S	C	P	S	.	.	.	.	.	.	D	A	F	G	.	S	C		276																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	NtSPS8	V	D	L	L	T	R	Q	I	T	S	P	E	V	D	S	S	Y	G	E	P	I	E	M	L	S	C	P	S	.	.	.	.	.	.	H	A	F	G	.	S	C		273																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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		Ser424	
	spinach.seq	RGVSCHGGRFMPMAKIPPGMEFNHIAPEDA..DMDTDIDG	458
FamilyB	NtSPS5	RGVNCHGRYMPRMAVIPPGMDFSNVVAQEDTADADGDLAA	454
	NtSPS6	RGVNCHGRYMPRMAVIPPGMDFSNVEAQEDTADADGDLAA	454
	NtSPS1	RNVSCYGRFMPRMAVIPPGMEFHhIVPHEG..DMDGETEG	450
FamilyA	NtSPS2	RNVSCYGRFMPRMAVIPPGMEFHhIVPHEG..DMDGETEG	450
	NtSPS3	RNVSCYGRFMPRAMVIPPGMEFHhIVPHEG..DMDGETEG	461
	NtSPS4	RNVSCYGRFMPRAMVIPPGMEFHhIVPHEG..DMDGETEG	426
FamilyC	NtSPS7	RGVSCLGRYMPRMVVIPPGMDFSNVNAQDL.LEGDGDLKS	475
	NtSPS8	RGVSCLGRYMPRMVVIPPGMDFSNVNAQDL.LEGDGDLKS	472
	Consensus	r v c gr mpr ippgm f d	