

**Supplemental Table S3. Protein sequences for phylogenetic tree**

<b>Specie</b>	<b>Gene name</b>	<b>Accession number</b>
<i>Petunia x hybrida</i>	<i>PhFBP2</i>	AAA86854
	<i>PhFBP4</i>	AAK21247
	<i>PhFBP5</i>	AAK21248
	<i>PhFBP9</i>	AAK21249
	<i>PhFBP23</i>	AAK21254
	<i>PhMADS12</i>	AAQ72498
<i>Antirrhinum majus</i>	<i>AmDEFH200</i>	CAA64743
	<i>AmDEFH72</i>	CAA64742
	<i>AmDEFH49</i>	CAA64741
<i>Malus domestica</i>	<i>MdSEP1</i>	NP_001280893
	<i>MdMADS4</i>	AAD51423
	<i>MdMADS5</i>	NP_001280756
	<i>MdMADS6</i>	NP_001281016
	<i>MdMADS7</i>	NP_001280849
	<i>MdMADS9</i>	CAA04920
<i>Beta vulgaris</i>	<i>BvCMB1</i>	XP_010681125
	<i>BvAGL9</i>	XP_010682728
	<i>BvSEPI</i>	XP_010694134
<i>Silene latifolia</i>	<i>SlSEP3</i>	BAD10945
<i>Arabidopsis thaliana</i>	<i>AtSEP1</i>	NP_001119230
	<i>AtSEP2</i>	NP_186880
	<i>AtSEP3</i>	NP_564214
	<i>AtSEP4</i>	NP_849930
	<i>AtAP1</i>	AEE34887.1
<i>Lycopersicon esculentum</i>	<i>LeMADS5</i>	AAP57413
	<i>LeRIN</i>	AAM15775
<i>Solanum lycopersicum</i>	<i>SITM29</i>	NP_001233911
	<i>SIMADS1</i>	NP_001234380
<i>Magnolia grandiflora</i>	<i>MgAGL2-like</i>	AAX53103
	<i>MgAGL9-like</i>	AAX53104
<i>Chrysanthemum x morifolium</i>	<i>CmCDM44</i>	AAO22982
	<i>CmCDM77</i>	AAO22983
	<i>HaHAM137</i>	AAO18233
<i>Helianthus annuus</i>	<i>AtrAGL2</i>	AAY25578
<i>Amborella trichopoda</i>	<i>AsSEPI</i>	ALE99364
<i>Annona squamosa</i>	<i>TfSEP3.3</i>	BAU80783
<i>Torenia fournieri</i>	<i>PaAGL9.2</i>	AAX15924
<i>Persea americana</i>	<i>EpSEP3-like</i>	ADC79706
<i>Euptelea pleiosperma</i>	<i>GhGRCD1</i>	CAC13148
	<i>GhGRCD5</i>	CAX65571
<i>Dianthus caryophyllus</i>	<i>DcaMADS1</i>	Dca58524.1
	<i>DcaMADS3</i>	Dca45289.1
	<i>DcaMADS2</i>	Dca4751.1
	<i>DcaMADS6</i>	Dca61854.1
	<i>DcaMADS7</i>	Dca42755.1
	<i>DcaMADS8</i>	Dca22562.1