

Supplementary table S2. *MADS-domain/ AGAMOUS-LIKE (AGL)* gene family and their homologues in *Medicago truncatula*, *Phaseolus vulgaris* and *Pisum sativum*.

Gene name	Accession №	Organism	References
<i>AtFUL</i>	At5g60910	<i>Arabidopsis thaliana</i>	Chu T et al., 2010
<i>AtAP1</i>	At1g69120	<i>Arabidopsis thaliana</i>	Monniaux et al., 2018
<i>AtSVP</i>	At2g22540	<i>Arabidopsis thaliana</i>	Liu et al., 2018
<i>AtAGL16</i>	At3g57230	<i>Arabidopsis thaliana</i>	Kutter C et al., 2007
<i>LjMADS</i>	Lj2g3v1467850	<i>Lotus japonicus</i>	-
<i>LjMADS6-like</i>	Lj2g3v0462690	<i>Lotus japonicus</i>	-
<i>LjSVP-like</i>	Lj2g3v1450690	<i>Lotus japonicus</i>	-
<i>LjSOC1</i>	Lj1g3v2608040	<i>Lotus japonicus</i>	Kou et al., 2022
<i>LjAGL8</i>	Lj2g3v1105380	<i>Lotus japonicus</i>	-
<i>LjAGL8-like</i>	Lj0g3v0012409	<i>Lotus japonicus</i>	-
<i>LjAGL8-like</i>	Lj4g3v1736110	<i>Lotus japonicus</i>	-
<i>LjAGL12-like</i>	Lj3g3v3737720	<i>Lotus japonicus</i>	-
<i>MtMADS1</i>	MtrunA17_Chr5g0412271	<i>Medicago truncatula</i>	Moreau et al., 2011
<i>MtFULa</i>	MtrunA17_Chr2g0308271	<i>Medicago truncatula</i>	Jaudal et al., 2015
<i>MtFULb</i>	MtrunA17_Chr4g0061691	<i>Medicago truncatula</i>	Jaudal et al., 2015
<i>MtFULc</i>	MtrunA17_Chr7g0220121	<i>Medicago truncatula</i>	Cheng et al., 2018
<i>MtSOC1a</i>	MtrunA17_Chr7g0246431	<i>Medicago truncatula</i>	Cheng et al., 2021
<i>MtSOC1b</i>	MtrunA17_Chr8g0351041	<i>Medicago truncatula</i>	Cheng et al., 2021
<i>MtSOC1c</i>	MtrunA17_Chr8g0351031	<i>Medicago truncatula</i>	Cheng et al., 2021
<i>MtAP1b</i>	MtrunA17_Chr5g0420081	<i>Medicago truncatula</i>	Zhu et al., 2018
<i>MtSVP-like</i>	MtrunA17_Chr5g0412461	<i>Medicago truncatula</i>	Cheng et al., 2021
<i>MtMIKC</i>	MtrunA17_Chr4g0018421	<i>Medicago truncatula</i>	-
<i>MtK-box</i>	MtrunA17_Chr5g0427961	<i>Medicago truncatula</i>	-
<i>MtPIM</i> , <i>MtBM5A</i>	MtrunA17_Chr8g0366231	<i>Medicago truncatula</i>	Jaudal et al., 2015 Benlloch et al., 2006
<i>PsFUL-like</i>	Psat4g046280	<i>Pisum sativum</i>	Rudaia et al., 2021
<i>PsSVP-like</i>	Psat2g080200	<i>Pisum sativum</i>	-
<i>PsPIM-like</i>	Psat4g122720	<i>Pisum sativum</i>	-
-	Psat7g151360	<i>Pisum sativum</i>	Kusakin et al., 2021
-	Psat2g065080	<i>Pisum sativum</i>	-
-	Psat0s657g0040.1	<i>Pisum sativum</i>	-

<i>PvFUL-like</i>	Phvul.008G027800	<i>Phaseolus vulgaris</i>	Ayra et al., 2021
<i>PvSVP-like</i>	Phvul.002G147600	<i>Phaseolus vulgaris</i>	Ayra et al., 2021
<i>PvSOC1-like</i>	Phvul.008G073800	<i>Phaseolus vulgaris</i>	Ayra et al., 2021
<i>PvAGL8-like</i>	Phvul.003G281000	<i>Phaseolus vulgaris</i>	
<i>PvAGL16-like</i>	Phvul.008G183700	<i>Phaseolus vulgaris</i>	Ayra et al., 2021
<i>PvAGL24-like</i>	Phvul.009G037300	<i>Phaseolus vulgaris</i>	Ayra et al., 2021
<i>PvXAL1-like</i>	Phvul.011G005800	<i>Phaseolus vulgaris</i>	Ayra et al., 2021