

Additional data file 11. Primers used for mutant genotyping, probes for mRNA *in situ* hybridization and RT-PCR

Gene/Mutant	Purpose ¹	Primers	T _m ²	Comments
<i>At1G78940</i>	ISH (ES)	GCA GGA AAT CAA GGA AAG TC + CCG TTA TGG GCC TAA CA	52	
<i>At5g40260</i>	ISH (ES)	TGG TGT TGG GTT AGT TAT CGA + TTC TCC TAA ACC CTC TCC GTA	58	
<i>At4g30590</i>	ISH (ES)	CCT TGT CTT CCT CTT GTT TGC + CCA AAC CAA CCA CGA CTG C	54	
<i>At3G61740</i>	ISH (ES)	CTG CAG CAA GAT GCC GTA + GCC GTT CTC TGA ATG ATG	52	
<i>At5g50915</i>	ISH (ES)	CTA CAC CTC ACT CCT CCA + GTG TTG GTG ATG GCT GAT GGT C	55	
<i>At5G60270</i>	ISH (ES)	CAG CAC CAC TCG TGA TCC + CGT TCT ACA AGC TAA GCT	52	
<i>At3G12110</i>	ISH (SP)	AAC TTT CAA CAC TCC TGC CAT G + CTG CAA GGT CCA AAC GCA GA	60	
<i>At4G12410</i>	RT, ISH (SP)	AAC ACA GAG AGA GAT AC + GCT AAT GAC CGG ATT CC	50	
<i>At1G75580</i>	RT, ISH (SP)	GTG TAC CCT GTG AGA GAC TTT + AAA GTC TCT CAC AGG GTA CAC	56	
<i>At5G03200</i>	RT, ISH (SP)	GAG GCA ACT CCA GCG GAA G + TGC GCA CCC GCT ACA CAT AC	60	
<i>At5G15980</i>	RT, ISH (SP)	CCA ACG AAT CTG CTG TAG + CAG ATG ATA AGC AAG TGG	50	
<i>STM</i>	RT, ISH (SP)	CAA CGT GTC GAG TGT CAA TTC + GTC CAG CCC CGT TGA TTC	55	
<i>At5G45420</i>	RT	CAC GAT GAG TCA TCC ACG + GCC ACC GTC TCC CAT CTC	52	
<i>At3G16770</i>	RT	GAT GAT GTC ATT GCG TCG + CTA CAC ATT ACA CAA CAG AC	52	
<i>At3G55660</i>	RT	ATG GAG GAT AAT AGC TGT ATC GGG + CCA ATT ATC TCC GGG GTT GA	55	
<i>At4G15800</i>	RT	ACT CTC CAC AAA ACC CGT TG + GTC GTG AGC AAG GAA CTG TG	55	
<i>At1G25330</i>	RT	GTA GTG TCT CTA ATG GCA CG + TCT CTT CGA CCC ACT CTC	50	
<i>SUP</i>	RT	CTC TAA GAG ACA GAC AGA CAT AG + GGC CAT GAA AAC CCT AGA AGA T	52	
<i>kerridwin-1</i>	genotyping	SM32: TAC GAA TAA GAG CGT CCA TTT TAG AGT GA B8-F: GGC TGA AAC ATC AAC TCC TTG TG B8-R: GCA CAT GTT AGG CAA GAG AGT G	55	SM32 + B8-R = 400 bp
<i>frigg-1</i>	genotyping	SK.LB: AGC TGT TGC CCG TCT CAC S1F1: CCT GGC ATG TTT GCT CTT CG S1R1: TGC AAG TGT GCT TCC GAG ATG	55	B8-f + B8-R = 500 bp S1F1 + S1R1 = 263 bp
<i>freya-1</i>	genotyping	VER-RB1: CAT CGG GAA TCG AAA GAT C FEY-F: CAA GTC ATG TTG CTG TCG ATA A FEY-R: CCG AAC AAA GGA TCA CCG C	58 47	S1F1 + SK.LB = 300 bp VER-RB1 + FEY-R: 500 bp
<i>omisha-1</i>	genotyping	SYN-LB1: CAG TAC ATT AAA AAC GTC CGC AA OMA-F: GGT ATC TCT CTT GTC AAA GGT TG OMA-R: GCA CTG ATA TGC CTT ATC TCA	52 52	FEY-F + FEY-R = 268 bp SYN-LB1 + OMA-F = 400 bp
<i>ilithyia-1</i>	genotyping	SK.LB: AGC TGT TGC CCG TCT CAC ILA-F: GTG CAG GCT GAT CCC AAC ILA-R: CTC TTC ATC AGA TGC CTA CAT G	52 55 52	FEY-F + FEY-R = 445 bp SK.LB + ILA-R = 280 bp ILA-F + ILA-R = 242 bp

¹ISH = mRNA *in situ* hybridisation; ES = embryo sac dataset; SP = sporophyte dataset; RT = Reverse-transcriptase PCR (RT-PCR)

²T_m = melting temperature (°C)