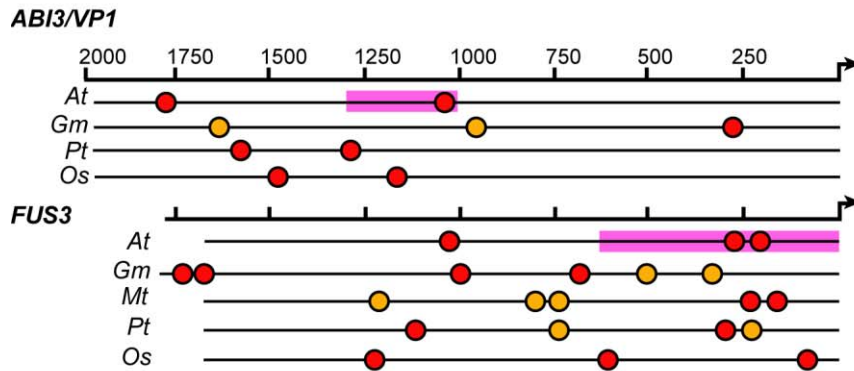


Supplemental Figure 1: Confirmation of knockout alleles of *IAA30*.

RNA was extracted from 21 day old SAM SE tissue of Col, wt and *iaa30-1* (SALK_065384) and *iaa30-2* (JIC SM line, ABRC stock CS112165), and RT-PCR performed to confirm lack of transcript accumulation in the *iaa30* knockout alleles using 37 cycles of PCR. *EF1α* served as a control (27 cycles of PCR).



Supplemental Figure 2: Conservation of CArG motifs within the regulatory regions of genes with homology to Arabidopsis (*At*) *ABI3* and *FUS3*.

Regulatory regions 5' of the start codon for Arabidopsis *ABI3* and *FUS3* (*At*) and genes encoding homologous proteins from *Glycine max* (*Gm*), *Populus trichocarpa* (*Pt*), *Oryza sativa* (*Os*), and *Medicago truncatula* (*Mt*) showing potential conserved cis elements recognized by MADS-domain proteins (red circle, perfect CC[A/T]₆GG, C[A/T]₈G or C[A/T]₇G; orange circle, near perfect). Pink indicates regions bound by AGL15 in Arabidopsis as identified by ChIP-chip.

Supplemental Table 1. Presence of previously known AGL15 targets and controls as bound in ChIP-chip. NP, not present.

AGI	Description	Reps. Partek	Reference
Previously identified targets expected on the array and present:			
At5g13790	<i>AGL15</i>	3/3	Zhu and Perry, 2005
At1g02400	<i>DTA1/GA2ox6</i>	2/3	Wang et al. 2002, 2004
At2g45830	<i>DTA2</i>	3/3	Wang et al., 2002
At4g34000	<i>ABF3</i>	3/3	Unpublished
At4g25470	<i>CBF2/DREB1c</i>	3/3	Hill et al., 2008
At2g21060	<i>CSP4/GRP2b</i>	3/3	Nakaminami et al., 2009
At3g57390	<i>AGL18</i>	3/3	Hill et al., 2008
At1g52690	<i>LEA76</i>	2/3	Hill et al., 2008
Previously used control regions not bound by AGL15:			
At3g18780	<i>ACT2</i>	NP	Unpublished
At1g07920	<i>EF1-α</i>	NP	Hill et al., 2008
At5g62690	<i>TUB2</i>	NP	Wang et al., 2002
At3g62250	<i>UBQ5</i>	NP	Wang et al., 2002, 2004
At2g47110	<i>UBQ6</i>	NP	Wang et al., 2002,2004
At1g21970	<i>LEC1</i>	NP	Unpublished
At3g26460	<i>Major latex ptn-related</i>	NP	Unpublished
At5g62700	<i>TUB3</i>	2/3	Wang et al., 2002

Supplemental Table 2. DNA fragments identified as being bound by AGL15 using ChIP-chip and verified by enrichment tests.

AGI	Description	C-some: Region bound (size in bp)	Location relative to gene	Reps. Partek
At1g28300	<i>LEC2</i>	1: 9897322-9897548 (226)	Exon/intron	2/3
At3g26790	<i>FUS3</i>	3: 9856994-9857647 (653)	5' intergenic/UTR	3/3
At3g24650	<i>ABI3</i>	3: 8996533-8996830 (297)	5' intergenic	3/3
		3: 9000395-9001006 (611)	3' gene/UTR/intergenic	3/3
At1g13260	<i>RAV1</i>	1: 4541398 -4542500 (1102)	5' intergenic/UTR/exon	3/3
At1g68840	<i>RAV2</i>	1: 25883619-25884235 (616)	5' intergenic/UTR/exon	3/3
At5g10140	<i>FLC</i>	5: 3173753-3173896 (143)	Intron/exon	2/3
At2g22540	<i>SVP</i>	2: 9586688-9587629 (941)	5' intergenic/UTR/exon	3/3
At1g14920	<i>GAI</i>	1: 5151231-5151882 (651)	3' UTR/intergenic	3/3
At1g30040	<i>GA2ox2</i>	1: 10537210-10537779 (569)	5' intergenic/UTR/exon	3/3
At2g20180	<i>PIF1</i>	2: 8713675-8714107 (432)	5' intergenic	3/3
At3g62100	<i>IAA30</i>	3: 23006436-23006595 (159)	5' intergenic	2/3
At5g61590	<i>ERF</i>	5: 24782339-24782661 (322)	5' intergenic/UTR/exon	3/3
At5g27320	<i>AtGID1c</i>	5: 9628908-9629696 (788)	5' intergenic/UTR/exon/intron	3/3
At4g38680	<i>GRP2</i>	4: 18072971-18073428 (457)	5' intergenic/UTR	3/3

Supplemental Table 3: Oligonucleotides used to confirm binding by AGL15 and response to AGL15.

AGI	Gene name	Forward	Reverse
For multiplex enrichment tests for ChIP			
At5g62690/ At5g62700	<i>TUB2 / TUB3</i>	CAC AAA GGA AGT TGA CGA GCA G	CGC CTG AAC ATC TCT TGG ATT G
At1g07920/ At1g07930/ At1g07940	<i>EF1α</i>	GTA CAA GGG ACC AAC TCT CCT T	GCA AAG GTC ACA ACC ATA CCA G
At2g47110/ At3g62250	<i>UBQ 5, UBQ6</i>	GGT GCT AAG AAG AGG AAG AAG	CTC CTT CTT TCT GGT AAA CGT
At5g13790	<i>AGL15</i>	GGA AGA AAA GGG GTA GGA CC	GAG AGA AGA AGG TAG AAG GAA GA
At4g25470	<i>CBF2</i>	TGC AAG TAT TTT TAG AGC AGT AAC	CAA TAA AAT ATC TTC ACA ACG AAC
At1g28300	<i>LEC2</i>	GAA CAA GCG ATC ACA CAC AGA C	CGA GGA CGA AAG CAA GAA TCT C
At3g26790	<i>FUS3</i>	GTT GTG CAG ATC GAA ACA GAG G	GAG AGA GAA GAA GAC GCC ATT G
At2g20180	<i>PIF1/PIL5</i>	GAG GTT GGT ACT GGA TAG GCT T	CCG TCA GCT ACA AAT GAT CTC AG
At5g27320	<i>GID1c</i>	TCC CTT CTC GGC TCA AAT CTT C	TCA GTC ACA AGG GTC AGA GA
At1g68840	<i>RAV2</i>	CTC GTC CAT TCC TCA CAT CAT C	GAA GAT GGT AGC TTT CGT GAC TCC
At1g61590	<i>ERF</i>	AAG GGT TCT AGA GAC CAG AGT C	CCC ACA GAG TTA AAC CAG AGA GAC
At5g10140	<i>FLC</i>	ATA CAA ACG CTC GCC CTT ATC AGC	AGT GGC TCA GTT CCA ACT CCA AGT
At3g24650	<i>ABI3, 5'</i>	GTC TGC CTC TTC CAC TTC AAT AG	GTT CCT CGA GAG AAA GAC ATT GG
At3g24650	<i>ABI3, 3'</i>	TGG GCT CCA AGA AGG TGA TTT C	TGA AGC GAC CAC CAC ATT
At1g13260	<i>RAV1</i>	CAC GTG GAC CCT TTA TCC ATT C	GGA AGT AAG ATG GGT GTG TAT GGG
At2g22540	<i>SVP</i>	CTT CTT CTC TCC TCG ACC TTT GAG	AGA GAG AGA GAG TGA CAA GAC GAC
At1g14920	<i>GAI</i>	GCA TGG TAT TAT AGG TGG ACC AG	GTC TAC TAC CAC CAC TGT CGA ATG
At1g30040	<i>GA2ox2</i>	GCT GTA TTT CCA TGT GTG CG	TCT AAA GTG ACT GGC TGT GG
At4g38680	<i>GRP2</i>	CTT ATC ACA TGC TGG CCC AT	CTC TGA AAT CTC TCT CTC CTC GCA
For qRT-PCR			
At5g19770	<i>TUA3</i>	AGG GCT TAC CAC GAG CAG CTA TCA	ACA GGC CAT GTA CTT TCC GTG TCT
At1g30040	<i>AtGA2ox2</i>	TAT TGG CTT CTT CGG CTT GCC T	TCC AAC CAA CGT CAC CGT TT
At3g26790	<i>FUS3</i>	TCA TCA TGG GTT ATC GGC GT	AGT TGG CAC GTG GGA AAT AGG A
At2g45470	<i>FLA8</i>	ACC GTG AGT AGC CAC AAC ATC A	TGC GCC ATT GTT AAG GAC GA
At1g28300	<i>LEC2</i>	ATC CTC AGA TCC CGG TTA CGC AAA	ACC ACC TCT CTC TTG CCA CAA ACA
At1g24260	<i>AGL9</i>	TTC GAG CAT GCT TCG GAC ACT	AGG CCT CTC TTG AAG GCA CAT T
At1g68840	<i>RAV2</i>	AAG GTG TTG TTC CTC AGC CT	ACA AGC TGC GAT GTC GTA GGA A
At3g62100	<i>IAA30</i>	ATA CTC GGA ACC TAA GCA CGG A	ATC ATC ATT TCC TCT GCC GCA C
At5g61590	<i>ERF</i>	AAC GTC ACC TGA GGT TGA GAC TGT	TCC TGG ATC CTT TCT TTG CCG GAT
At5g10140	<i>FLC</i>	TCG GAG AGA AGC CAT GGG AAG AAA	TTG CGA CGT TTG GAG AAG GT
At3g24650	<i>ABI3</i>	ACT GTG ACG ACT CTT CTG GTG CAT	ATC AAT GCA ATC ACC ACC GCC TTC
For qPCR for ChIP			
At5g19770	<i>TUA3</i>	AGG GCT TAC CAC GAG CAG CTA TCA	ACA GGC CAT GTA CTT TCC GTG TCT
At3g24650	<i>ABI3 5'</i>	ACC GCT TGG TCT CAC CAC TCA AAT	AAA TAG AAG TCT CCT CGT GCC GCT
At3g24650	<i>ABI3, 3'</i>	GGG TTA AAG TAA GAC AAC CGA GCG GA	TTG AGA AGT TGG TGA AGC GAC CAC
At1g28300	<i>LEC2</i>	AGT GGT TCC TTT CCC TCG ACT CAT	GTG TCT GTG TGT GAT CGC TTG TTC
At3g26790	<i>FUS3</i>	AGA ACC AAG AGC AAA GGG ACG AGT	TGG TAG AGA GAG AGA AGA AGA CGC CA
At3g62100	<i>IAA30</i>	CGA AAG GTA GTA CTA GGA GTC GAG	GCA GAC AAA TAC ACG TGT CAT GCA G
At3g18780	<i>ACT2</i>	AAG CTG TTC TCT CCT TGT ACG CCA	ACA GTG TGA GAC ACA CCA TCA CCA
At1g21970	<i>LEC1</i>	GGG CCG TGA AAC CCA ATA CCA TTT	ACC GAT CGT GGT TCT GCA CTT AGA