

Table S1. Overview of proteins involved in the study and experimental evidences.

GROUP	NAME	Gene description (NCBI)	AGI	ABRC stock	entry clone	Y2H expression			Experimental evidences								
						autoactivation or false discovery	b.d.w. below detection of western blot	NO TRANSFORMANTS, NO CLONE	AITERT	AITERT and/or POT1a constructs	mutual interactions						
									TAP (TEU-RID-4w1C), ref.1	Y2H	BIFC	Co-IP	Y2H	BIFC	Co-IP	details in	
Chromatin related																	
	MSI1	Transducin/WD40 repeat-like superfamily protein	At5g58230	U16887					1(1)-2(2)-0	n.d.							
	NAP1.1	nucleosome assembly protein1.1	At4g26110	U16467					1(1)-4(4)-4(5)								Fig.1, Table S2
	NAP1.2	nucleosome assembly protein1.2	At2g19480	U25256					1(1)-7(7)-5(6)								Fig.1, Table S2
	NAP1.3	nucleosome assembly protein1.3	At5g56950	U15293					0								
	NRP1	NAP1-related protein 1	At1g74560	G12601					0-3(3)-1(1)	n.d.							Fig.1, Table S2
	NRP2	NAP1-related protein 2	At1g18800	cDNA	this work					n.d.							Fig.1, Table S2
	HMG84	high mobility group B4	At2g17560	GC104732					0-1(1)-0	n.d.							Table S2
	CHC1	SWI8/MDM2 domain superfamily protein	At5g14170	G15375					3(3)-0-0								Table S2
	HON4	winged-helix DNA-binding transcription factor family protein	At3g18035	G17136					0-0-3(3)	n.d.							Fig.1, Table S2
	ARP4	actin-related protein 4	At1g18450	G23361					1(1)-2(2)-3(3)								Table S2
	RCC1	Regulator of chromosome condensation (RCC1) family protein	At1g19880	cDNA	this work				1(1)-0-0	n.d.							
	AT5G13560	structural maintenance of chromosomes protein	At5g13560	G60575					3(3)-0-0	n.d.							
	HDC1	zinc finger CCH domain protein; Histone Deacetylation Complex 1	At5g08450	G19376					2(2)-0-0	n.d.							
	VIP1	VIRE2-interacting protein 1	At1g43700	G11985		BD			1(1)-0-2(2)	n.d.							
Replication and cell cycle related																	
	MCM2	Minichromosome maintenance (MCM2/3/5) family protein	At1g44900	cDNA	this work	BD	AD		3(3)-0-0	n.d.							
	MCM3	Minichromosome maintenance (MCM2/3/5) family protein	At5g46280	cDNA	this work		AD, BD		0-1(1)-0	n.d.							
	MCM4	Minichromosome maintenance (MCM2/3/5) family protein	At2g16440	cDNA	this work		BD		1(1)-1(1)-0			n.d.					
	MCM5	Minichromosome maintenance (MCM2/3/5) family protein	At2g07690	AGR4_5_D7	subcloned		AD		0		b.d.w						
	MCM6	Minichromosome maintenance (MCM2/3/5) family protein	At5g44635	cDNA	this work		AD, BD		3(3)-1(1)-0	n.d.							
	MCM7 (PROLIFERA)	Minichromosome maintenance (MCM2/3/5) family protein	At4g02060	CW00446	subcloned		BD		0		b.d.w						
	RPA3	Nucleic acid-binding, OB-fold-like protein	At4g18590	cDNA	this work	BD			0-1(1)-3(3)	n.d.	n.d.						
	PCNA1	proliferating cellular nuclear antigen 1	At1g07370	G21468					1(1)-3(3)-3(3)	n.d.							
	RBR1	retinoblastoma-related 1	At3g12280	GC104790			AD, BD		3(3)-0-0	n.d.							
	ETG1	E2F target protein 1	At2g40550	cDNA	this work				0	n.d.							
	AT2G33845	Nucleic acid-binding, OB-fold-like protein	At2g33845	U17317					0	n.d.							
	AT4G28440	Nucleic acid-binding, OB-fold-like protein	At4g28440	G11014					0-1(1)-0	n.d.							
Mitochondrial, chloroplast and multiple subcellular localization																	
	SSB1	Nucleic acid-binding, OB-fold-like protein	At3g18580	cDNA	this work		BD		1(1)-1(1)-2(2)			n.d.					
	MISSB	mitochondrially targeted single-stranded DNA binding protein	At4g11060	G20710					1(1)-1(1)-1(1)								
	Why1	ssDNA-binding transcriptional regulator	At1g14410	cDNA	this work				0-0-3(4)								
	MtGP1	Mitochondrial glycoprotein family protein	At5g02050	G23229					2(2)-1(1)-1(1)								
	MtGP2	Mitochondrial glycoprotein family protein	At2g39795	U16670					2(2)-1(1)-1(1)	n.d.							
	MtGP3	Mitochondrial glycoprotein family protein	At1g80720	G82191		BD			4(4)-2(2)-0			n.d.					
	MtGP4	Mitochondrial glycoprotein family protein	At5g05990	DKLAT5G05990	subcloned				2(2)-1(1)-0	n.d.							
	MtGP5	Mitochondrial glycoprotein family protein	At1g15870	G13328					0-1(1)-0	n.d.							
	MtGP6	Mitochondrial glycoprotein family protein	At4g31930	G12189					0	n.d.							
	AT5G12470	UvrABC system C protein, putative (DUF3411)	At5g12470	G17615					4(4)-0-0	n.d.							
	EMB1796	Pentatricopeptide repeat (PPR) superfamily protein	At3g49240	G24783					3(3)-1(1)-0	n.d.							
	RecA2	recA DNA recombination family protein	At2g19490	G87524					4(4)-0-0	n.d.							
	NAP6	non-intrinsic ABC protein 6	At1g32500	CW02398					1(1)-1(1)-2(2)	n.d.							
	PAM16	Protein Transporter, Pam16	At3g59280	G12498					0-0-2(2)	n.d.							
	AT4G01990	Tetratricopeptide repeat (TPR)-like superfamily protein	At4g01990	G12802		BD			4(4)-0-0	n.d.							
Protein trafficking and folding																	
	ImpA1	importin alpha	At3g06720	G21893		BD			1(2)-2(4)-0								
	ImpA2	importin alpha	At4g16143	cDNA	this work	BD			5(6)-8(10)-5(5)								
	ImpA3	importin alpha	At4g02150	G12574		BD			1(1)-0-0								
	ImpA4	importin alpha	At1g09270	cDNA	this work	BD			1(1)-0-0								
	ImpA6	importin alpha	At1g02690	cDNA	this work	BD			2(2)-0-0								
	AT3G59020	ARM repeat superfamily protein	At3g59020	cDNA	this work		AD		4(6)-2(3)-0								
	TRN1	transportin 1	At2g16950	G16482			BD		15(15)-5(5)-0	n.d.							
	IMB3 (EMB2734)	ARM repeat superfamily protein	At5g19820	G09318			BD		7(7)-7(7)-0	n.d.							
	IMB4	ARM repeat superfamily protein	At4g27640	cDNA	this work				6(6)-0-0	n.d.							
	AT4G15545	PH-response transcription factor	At4g15545	U24500			AD		0-0-4(4)	n.d.	b.d.w.	n.d.					
	AT1G16530	hypothetical protein	At1g16520	G61069		BD			0-0-3(3)	n.d.							
	HSP90-7	Chaperone protein htpG family protein	At4g24190	G12900			AD		4(4)-5(7)-7(9)								
	HSP20 (p23-like)	HSP20-like chaperones superfamily protein	At4g02450	G22131		BD			2(2)-4(4)-9(9)	n.d.	n.d.						
	BOBBER	HSP20-like chaperones superfamily protein	At5g53400	G22518					0-0-2(2)	n.d.							
	Aha1	Aha1 domain-containing protein	At3g12050	U15836					7(7)-2(2)-0	n.d.							
	FyPP3	flower-specific, phytochrome-associated protein phosphatase 3	At3g19980	G21104		BD			1(1)-0-1(1)		n.d.						
	P5CS2	delta 1-pyrroline-5-carboxylate synthase 2	At3g55610	G2E1	subcloned		AD, BD		3(3)-1(1)-1(1)	n.d.							
	EXORDIUM	Phosphate-responsive 1 family protein	At4g08950	cDNA	this work				0-0-6(6)	n.d.	n.d.						
	CPPI	Cyclophilin-like peptidyl-prolyl cis-trans isomerase family protein	At2g36130	G12629					0-0-2(2)	n.d.							
	GCN1	ABC transporter family protein	At5g60790	G24471					8(8)-1(1)-0	n.d.							
	RAD23-1	Rad23 UV excision repair protein family	At1g79650	G09913					0-0-1(1)	n.d.							
	RAD23-2	Rad23 UV excision repair protein family	At1g16190	cDNA	this work		AD, BD		0-0-1(1)	n.d.							
	RAD23-3	Rad23 UV excision repair protein family	At3g02540	G12782			BD		0-1(1)-0								
	RAD23-4	Rad23 UV excision repair protein family	At5g38470	G12657			BD		0-1(1)-1(1)								
	FUS12	proteasome family protein	At2g26990	G13351					0-1(1)-0	n.d.							
Golgi, cytoplasm and membrane proteins																	
	COG2	oligomeric golgi complex subunit-like protein	At4g24840	G12247					4(4)-0-0								
	COG8	conserved oligomeric Golgi complex component-related / COG complex component-like protein	At5g11980	cDNA	this work				3(3)-0-0								
	GTCR (COG5)	Golgi transport complex protein-like protein	At1g67930	cDNA	this work				3(3)-0-0, ref.2								
	AT3G49720	transmembrane protein	At3g49720	PDEST-AD096F02					0-0-2(2)	n.d.							

SKS2	SKUS similar 2	At5g51480	G20700						0-0-2(2)	n.d.									
SKD1	AAA-type ATPase family protein	At2g27600	G12244					AD	9(9)-0-0	n.d.									
LOTR1	NEP-interacting protein, putative (DUF239)	At5g50150	G13562						0-0-2(2)	n.d.									
GASAS	GAST1 protein homolog 5	At3g02885	G20167						0-0-3(3)	n.d.									
SEC31B	transducin family protein / WD-40 repeat family protein	At3g63460	G25292						12(12)-3(3)-1(1)	n.d.									
FLP1	SPFH/Band 7/PHB domain-containing membrane-associated protein family	At5g25250	G85737						0-3(3)-0	n.d.									
AT5G22875	SPFH/Band 7/PHB domain-containing membrane-associated protein family	At5g22875	G83353						0-0-1(1)	n.d.									
HIRP2	SPFH/Band 7/PHB domain-containing membrane-associated protein family	At1g69840	U25581						0-3(3)-1(1)										
HIRP4	SPFH/Band 7/PHB domain-containing membrane-associated protein family	At5g51570	G23238						0-2(2)-0										
Translation, ribosome processing and maturation related																			
NAT10	GNA1 acetyltransferase (DUF699)	At1g10490	cDNA	this work				AD, BD	4(6)-0-0	n.d.	b.d.w.								
RPL23a-1	ribosomal protein L23AB	At2g39460	G12711						1(1)-0-4(4)	n.d.									
RPL23a-2	ribosomal protein L23AB	At3g55280	U13359	subcloned					1(1)-0-4(4)	n.d.									
RPL22B	ribosomal protein L22	At3g05560	G24108						0-0-2(2)	n.d.									
RPL22C	ribosomal protein L22	At5g27770	G23628						2(2)-0-0	n.d.									
RPL34-1	ribosomal protein L34	At1g26880	U18074	subcloned					1(1)-1(1)-2(2)	n.d.									
RPL34-2	ribosomal protein L34	At1g69620	G09061						1(1)-1(1)-2(2)	n.d.									
NOC4	CCAAT-binding factor; Nucleolar Complex associated 4	At2g17250	cDNA	this work				AD	1(1)-0-0	n.d.									
La1	La protein 1	At4g32720	cDNA	this work					0-1(1)-14(14)	n.d.									
AT5G18420	CCR4-NOT transcription complex subunit	At5g18420	U87669	subcloned				BD	5(5)-0-0	n.d.									Fig. 6
DOMINO1	EMB514 (DUF3223)	At5g62440	DKLAT5G62440	subcloned					0-0-4(4)										Fig. 6
AT1G22730	MA3 domain-containing protein	At1g22730	G10029						1(1)-0-0	n.d.									
Alba5	Alba DNA/RNA-binding protein	At1g20220	G68595						0-0-4(5)										Fig. 6
Alba2	Alba DNA/RNA-binding protein	At2g34160	DKLAT2G34160	subcloned					0-0-2(8)	n.d.									
AT3G20800	Cell differentiation, Rcd1-like protein	At3g20800	G19475					BD	1(1)-0-0	n.d.									
AT5G12980	Cell differentiation, Rcd1-like protein	At5g12980	G61388					BD	1(1)-0-0										
AT4G10970	ribosome maturation factor	At4g10970	G82238						0-0-2(2)										
AT3G22660	rRNA processing protein-like protein	At3g22660	G14182						0-0-3(3)										
AT5G12410	THUMP domain-containing protein	At5g12410	G22143						2(2)-1(1)-0	n.d.									
KRS1	lysyl-tRNA synthetase 1	At3g11710	cDNA	this work					1(1)-3(3)-0	n.d.									
EIF2B	transferases/nucleotidyltransferase	At5g19485	DQ487627						1(1)-0-2(2)	n.d.									
AT5G35680	Nucleic acid-binding, OB-fold-like protein	At5g35680	cDNA	this work					1(1)-0-1(1)										Fig. 6
AT2G04520	Nucleic acid-binding, OB-fold-like protein	At2g04520	cDNA	this work				AD											Fig. 6
Nucleic acids binding, nucleolar, RNA processing and transcription related																			
DNA helicase	DNA-binding protein	At2g03270	G10439						1(1)-1(1)-0	n.d.									
AT2G40660	Nucleic acid-binding, OB-fold-like protein	At2g40660	DKLAT2G40660	subcloned					1(1)-1(1)-5(5)	n.d.	n.d.								
RBP45B	RNA-binding (RRM/RBD/RNP motifs) family protein	At1g11650	G24089					BD	1(1)-1(1)-0	n.d.									
AT2G42780	transcription elongation factor B polypeptide	At2g42780	U15059						0-1(1)-0	n.d.									
TFIIEα	Transcription initiation factor TFIIE, alpha subunit	At1g03280	G11093						1(1)-0-0	n.d.									
TFIIEβ	Transcription initiation factor TFIIE, beta subunit	At4g20330	G12596						0-0-1(1)	n.d.									
NRP5B	Eukaryotic rpb5 RNA polymerase subunit family protein	At3g22320	U15651						1(1)-1(1)-0	n.d.									
NRPB9A	RNA polymerases M/15 Kd subunit	At3g16980	G63017					BD	2(2)-0-0	n.d.									
AT5G17510	mediator of RNA polymerase II transcription subunit-like protein	At5g17510	cDNA	this work				BD	1(1)-0-2(2)										
AT3G03460	mediator of RNA polymerase II transcription subunit-like protein	At3g03460	PENTR221-AT3G03460					BD	0										
AT1G15790	mediator of RNA polymerase II transcription subunit 15a-like protein	At1g15790	cDNA	this work				BD	0-0-1(1)	n.d.									
AT1G43860	sequence-specific DNA binding transcription factor	At1g43860	G15107						0-2(2)-0	n.d.									
PDCD5	double-stranded DNA-binding family protein	At1g29850	G10496						0-0-1(1)	n.d.									
AT3G12210	DNA binding protein	At3g12210	G09693						0-1(1)-0										
FIB1	fibrillarin 1	At5g52470	G22214						0-3(3)-2(2)										Fig. 6
FIB2	fibrillarin 2	At4g25630	GC104723						3(3)-0-2(2)										Fig. 6
NUC1	nucleolin like 1	At1g48920	GC105460						0	n.d.									
NUC2	nucleolin like 2	At3g18610	PENTR221-AT3G18610					BD	0	n.d.									
NOP56L	NOP56-like pre RNA processing ribonucleoprotein	At1g56110	G12771						5(5)-3(3)-0	n.d.									
NOP58L	NOP56-like pre RNA processing ribonucleoprotein	At5g27120	G18855						2(2)-0-0	n.d.									
ATR21C	RNA-binding (RRM/RBD/RNP motifs) family protein with retrovirus zinc finger-like domain-containing protein	At5g04280	U16833					AD	0-0-3(3)	n.d.									
DAYSLEEPER	BED zinc finger and hAT dimerization domain-containing protein	At3g42170	G22891						5(5)-0-0	n.d.									
RNA helicase 2	RNA helicase 2; eukaryotic initiation factor 4A-III	At3g19760	G13337					AD	1(4)-3(6)-2(3)										
RNA helicase 3B	RNA helicase family protein	At3g53110	G17291						3(3)-3(3)-2(2)	n.d.									
RNA helicase DEAH2	RNA helicase family protein	At3g62310	G17044					AD, BD	1(1)-1(1)-0	n.d.									
U2A'	U2 small nuclear ribonucleoprotein A	At1g09760	U16714						0-0-1(1)	n.d.									
LSm4	embryo defective 1644; SM-like protein 4	At5g27720	U17471						1(1)-0-1(1)										Fig. 6
AT4G17520	Hyaluronan / mRNA binding family	At4g17520	U15691						1(2)-0-3(4)	n.d.									
WDR26	transducin family protein / WD-40 repeat family protein	At5g08560	cDNA	this work					1(1)-0-0										
CSP1	cold shock domain protein 1	At4g36020	cDNA	this work				BD	0-0-3(3)	n.d.									
TCP22	TCP family transcription factor	At1g72010	G10497						0-0-1(1)	n.d.									
FBH1	FLOWERING BHLH 1	At1g35460	G13468					BD	0-0-1(1)	n.d.									
ZML1	GATA TRANSCRIPTION FACTOR 24, ZIM-like 1	At3g21175	U15151						1(1)-0-0										
ZML2	GATA TRANSCRIPTION FACTOR 28, ZIM-like 2	At1g51600	GC104791																
WLIM1	GATA type zinc finger transcription factor family protein	At1g10200	cDNA	this work					2(2)-0-0	n.d.									
KNAT3	homeobox protein knotted-1-like 3	At5g25220	TOPO-U10-H02						1(1)-0-0										
KNAT4	homeobox protein knotted-1-like 4	At5g11060	AGR3_1_F1																
KNAT5	homeobox protein knotted-1-like 5	At4g32040	G82564																
AT5G01380	Homeodomain-like superfamily protein	At5g01380	TOPO-U12-G01					AD, BD	1(1)-0-0	n.d.									
DAG1	dof affecting germination 1	At3g61850	TOPO-U11-D09					BD	AD	1(1)-0-1(1)	n.d.								
DAG2	dof affecting germination 2	At2g46590	G25057						BD	0-0-1(1)	n.d.								
AT4G24060	Dof-type zinc finger DNA-binding family protein	At4g24060	TOPO-U17-H03						AD, BD		n.a.								
AT3G52440	Dof-type zinc finger DNA-binding family protein	At3g52440	TOPO-U01-G09						AD, BD		n.a.								
DOFL8	Dof-type zinc finger DNA-binding family protein	At1g64620	G20433					BD		n.d.									
SCL5	scarecrow-like 5	At1g50600	GC105359					AD, BD		1(1)-0-0	n.d.								
BZR1	Brassinosteroid signaling positive regulator (BZR1) family protein	At1g75080	G21167					BD		0-0-1(1)	n.d.								
BEH1	Brassinosteroid signaling positive regulator (BZR1) family protein	At1g19350	TOPO-U16-H10					BD			n.d.								
BEH1	BEH1/BZR1 homolog 1	At3g50750	G17510								n.d.								
BEH3	BEH1/BZR1 homolog 3	At4g18890	G82375					BD			n.d.								
BEH4	BEH1/BZR1 homolog 4	At1g78700	G13344					BD			n.d.								
AT2G38300	myb-like HTH transcriptional regulator family protein	At2g38300	G50495					BD		0-0-1(1)	n.d.								

AT3G12130	KH domain-containing protein / zinc finger (CCH type) family protein	At3g12130	TOPO-U10-A07					0-0-1(1)	n.d.						
bZIP30-1	Basic-leucine zipper (bZIP) transcription factor family protein	At2g21230	U16462		BD			1(1)-0-0	n.d.						
PosF21	Basic-leucine zipper (bZIP) transcription factor family protein	At2g31370	G14527		BD			1(1)-0-0	n.d.						
MBF1b	multi-protein bridging factor 1B	At3g58680	U15921					1(1)-0-0	n.d.						
LFR	ARM repeat superfamily protein	At3g22990	G20071		BD			0-1(1)-0							
DRM1	dormancy-associated protein-like 1	At1g28330	G12703		BD			0-0-2(2)	n.d.						
MVQ1	VQ motif-containing protein	At1g28280	G68533		BD			1(1)-0-0	n.d.						
CBTAS	calmodulin-binding transcription activator 5	At4g16150	TOPO-U21-C04		BD		AD	4(4)-0-0	n.a.						
AT1G61730	DNA-binding storekeeper protein-related transcriptional regulator	At1g61730	TOPO-U16-B02				AD, BD	0-0-1(1)	n.d.						
AT4G25210	DNA-binding storekeeper protein-related transcriptional regulator	At4g25210	TOPO-U12-F07				AD, BD	1(1)-0-0	n.d.						
AT5G39570	transmembrane protein	At5g39570	U24024				AD, BD	0-0-6(6)	n.d.						
Regulatory and miscellaneous functions															
GH3.15	Auxin-responsive GH3 family protein	At5g13370	G60233					2(2)-3(3)-1(1)	n.d.						
ARF8	Auxin response factor 8	At5g37020	TOPO-U19-A09		BD	AD		0-0-1(1)	n.d.						
NDR	ARF protein	At1g49670	G15527					1(1)-1(1)-3(3)	n.d.						
AT3G58180	ARM repeat superfamily protein	At3g58180	G12373					0-0-1(1)	n.d.						
UGP1	UDP-GLUCOSE PYROPHOSPHORYLASE 1	At3g03250	G09432					1(1)-1(4)-3(3)	n.d.						
UGP2	UDP-GLUCOSE PYROPHOSPHORYLASE 2	At5g17310	G09212					1(1)-1(4)-0	n.d.						
AT5G14790	ARM repeat superfamily protein	At5g14790	U24397					3(3)-0-0	n.d.						
AT2G15860	BAT2 domain protein	At2g15860	U25045					6(6)-2(2)-1(1)	n.d.						
EER1	ARM repeat superfamily protein	At1g25490	U16272					2(4)-1(1)-0	n.d.						
NRX1	DC1 domain-containing protein	At1g60420	G18665					3(3)-2(2)-0	n.d.						

Notes:

autoactivation; transformants with AD/BD-protein-of-interest and BD/AD-empty vector grew on -LWH plates supplemented with more than 5mM aminotriazole, constructs were omitted from Y2H study
false discovery; transformants with AD/BD-protein-of-interest and BD/AD-empty vector grew on -LWHADe plates, constructs were omitted from Y2H study
b.d.w.; expression of proteins in Y2H transformants or of transiently expressed constructs in *N. benthamiana* leaves (BiFC) was below detection limit of western blot analysis using anti-tag antibodies
no transformants; yeast transformants containing AD and BD constructs did not grow on -LW selective plates
no clone; preparation of specific AD or BD construct using LR clonease reaction failed

n.a.: not analysed

n.d., interaction not detected

interaction detected

References:

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