

Supplementary Table S1. Accession numbers and descriptions of Arabidopsis thaliana proteins containing a GH1 domain from different databases (TAIR10, UniProt, NCBI and ChromDB\*). This table is supplemented with data concerning the occurrence, rank and scores of proteins identified in the nuclear proteome of Arabidopsis T-87 suspension culture cells (6753 proteins identified in total, www.proteome.arabidopsis.pl) and localization of gene expression according to the BAR Toronto database (Fucile et al., 2011) (http://bar.utoronto.ca/). \*a copy of this discontinued database in the web archive was used.

	Symbol	TAIR		Uniprot		len gth	NCBI		ChromDB	Nuclear proteome			BAR Toronto
		AGI / locus	Description	ID	Description		ID	Description		rank	score	presence	
1	<b>GH1-HMGA1</b>	AT3G18035.1	HON4   winged-helix DNA-binding transcription factor family protein	Q9LSK7	HON4 At3g18035	480	ref NP_188431.3 dbj BAB01332.1 gb AAO00794.1 gb AAP31950.1 gb AEE76037.1	HON4; unnamed protein product; linker histone protein, putative; At3g18035; winged-helix DNA-binding transcription factor family protein	-	1458	843	+	most tissues, not pollen
2	<b>GH1-HMGA2</b>	AT1G48620.1	HON5   high mobility group A5	Q4V3D1	HON5 At1g48620	479	ref NP_175295.1 gb AAY56416.1 gb ABF57274.1 gb AEE32328.1	At1g48620; high mobility group A5	HMGA2	1017	963	+	apical meristem, most other tissues
3		<i>AT1G48620</i>		Q9LP61	T1N15.25	594	gb AAF79708.1 AC020889_16	T1N15.25				+	
4		<i>AT1G48620</i>		Q9C6X5	Putative uncharacterized protein F9P7.3	332	gb AAG50847.1 AC074308_3	hypothetical protein, 3' partial				+	
5	<b>GH1-HMGA3</b>	AT1G14900.1	HMGA   high mobility group A	Q43386	HMG-Y-related protein A   At1g14900,F10B6.31	204	ref NP_172943.1 sp Q43386.1 HMGYA_ARATH gb AAF79232.1 AC006917_17 emb CAA67564.1 gb AAB97739.1 gb AAO44072.1 dbj BAH19921.1 gb AEE29240.1 emb CAA71797.1 (one mismatch)	high mobility group protein A; F10B6.31; HMG-Y-related protein A; HMG-I/Y protein	HMGA3	3144	122	+	apical meristem, most other tissues, phloem companion cells
6	<b>GH1-HMGA-related4</b>	AT5G08780.1	winged-helix DNA-binding transcription factor family protein	Q6AWW7	At5g08780	457	ref NP_680160.2 gb AAT85727.1 gb AAU94419.1 gb AED91349.1	winged-helix DNA-binding transcription factor family protein; At5g08780	HMGA4	-	-	-	no data
7		<i>AT5G08780</i>		Q9C599	Putative uncharacterized protein At5g08780	463	emb CAC35883.1	putative protein					
8	<b>GH1-Myb-TRB1 (SMH10)</b>	AT1G49950.1	TRB1, ATTRB1   telomere repeat binding factor 1	Q8VWK4	Telomere repeat-binding factor 1   TRB1 At1g49950,F2J10.16 (Identical sequences of proteins in all splice variants)	300	ref NP_564559.1 ref NP_849789.1 ref NP_973998.1 sp Q8VWK4.1 TRB1_ARATH gb AAL73123.1 U83623_1 gb AAL32814.1 gb AAP80178.1 gb AAS10009.1 gb AEE32497.1 gb AEE32498.1 gb AEE32499.1 gb AAL73438.1 U83624_1 (one mismatch) gb AAM65540.1 (two mismatches)	telomere repeat binding factor 1; MYB transcription factor; Unknown protein; At1g49950; DNA-binding protein PcMYB1, putative	SHM10	688	3025	+	mature pollen, most other tissues
9		AT1G49950.2	TRB1, ATTRB1   telomere repeat binding factor 1										
10		AT1G49950.3	TRB1, ATTRB1   telomere repeat binding factor 1										
11		<i>AT1G49950</i>											

12	GH1-Myb-TRB2 (SMH11)	AT5G67580.1	TRB2, ATTRB2, TBP3, ATTBP3   Homeodomain-like/winged-helix DNA-binding family protein	Q9FJW5	Telomere repeat-binding factor 2   TRB2 (Identical sequences of proteins in both splice variants)	299	ref NP_201559.1 ref NP_851286.1 sp Q9FJW5.1 TRB2_ARATH gb AAL73442.1 U83836_1 dbj BAB08466.1 gb AAK63987.1 gb AAL76146.1 gb AAS10015.1 gb AED98362.1 gb AED98363.1 gb AAL73441.1 U83837_1 (one mismatch)	telomere repeat binding factor 2; MYB transcription factor; Telomere-binding protein 3; unnamed protein product; AT5g67580/K919_15;	SMH11	4281	181	below threshold, detected in 2 samples only	most tissues
13		AT5G67580.2	TRB2, ATTRB2, TBP3, ATTBP3   Homeodomain-like/winged-helix DNA-binding family protein										
14		AT5G67580					G0XQD5						
15	GH1-Myb-TRB3 (SMH14)	AT3G49850.1	TRB3, ATTRB3, TBP2   telomere repeat binding factor 3	Q9M2X3	Telomere repeat-binding factor 3   TRB3 TBP2,At3g49850,T16K5.200	295	ref NP_190554.1 sp Q9M2X3.1 TRB3_ARATH gb AAL73439.1 U83839_1 gb AAL73440.1 U83838_1 emb CAB66923.1  gb AAL24273.1  gb AAL57702.1  gb AAL79593.1  gb AAS10012.1  gb AEE78598.1	telomere repeat binding factor 3; MYB transcription factor; Telomere-binding protein 2; MYB-like protein; AT3g49850/T16K5_200	SMH14	5906	31	below threshold, only one peptide detected, low score	most tissues
16	GH1-Myb4 (TRB4, SMH13)	AT1G17520.1	Homeodomain-like/winged-helix DNA-binding family protein	F4I7L1	Telomere repeat-binding factor 4   At1g17520,F1L3.23	296	sp F4I7L1.2 TRB4 dbj BAC43136.1 gb AAO63354.1 gb AAS10008.1 ref NP_173195.2  (one mismatch) gb AEE29601.1  (one mismatch)	Telomere repeat-binding factor 4; putative telomere repeat-binding factor 4; MYB transcription factor; putative myb-related DNA-binding protein; At1g1752	SMH13	-	-	-	dry seed
17		AT1G17520				240	gb AAF79481.1 AC022492_25	F1L3.23					
18	GH1-Myb5 (TRB5, SMH12)	AT1G72740.1	Homeodomain-like/winged-helix DNA-binding family protein			289	gb AAG51858.1 AC010926_21	putative DNA-binding protein; 27830-29933	SMH12	5374	57	below threshold, only one peptide detected	mature pollen, most other tissues
19		AT1G72740		F4IEY4	Telomere repeat-binding factor 5   At1g72740,F28P22.7	287	ref NP_001077814.1 gb AEE35367.1	homeodomain-like/winged-helix DNA-binding protein					
20		AT1G72740.2	Homeodomain-like/winged-helix DNA-binding family protein	F4IEY3	Homeodomain-like/winged-helix DNA-binding protein	281	ref NP_177418.2 sp F4IEY4.1 TRB5_ARATH gb AEE35366.1	homeodomain-like/winged-helix DNA-binding protein; Telomere repeat-binding factor 5; MYB transcription factor; homeodomain-like/winged-helix DNA-binding protein					
21		AT1G72740				151	gb AAK50065.1 AF372925_1 gb AAM70558.1	At1g72740/F28P22_7					
22	GH1-Myb-related6	AT1G54230.1	Winged helix-turn-helix transcription repressor DNA-binding	F4HV91	Winged helix-turn-helix transcription repressor DNA-binding protein	232	ref NP_175825.2 gb AEE33069.1	winged helix-turn-helix transcription repressor DNA-binding protein	-	-	-	-	flower buds, mature pollen, cotyledones
23		AT1G54230		Q9SLK9	Putative uncharacterized protein F20D21.5	276	gb AAD25603.1 AC005287_5	Hypothetical protein					

24	GH1-Myb-related7	AT1G54240.1	winged-helix DNA-binding transcription factor family protein	Q1PFK5	Winged-helix DNA-binding transcription factor family protein	229	ref NP_175826.2 gb ABE65711.1 gb AEE33070.1	winged-helix DNA-binding transcription factor family protein; hypothetical protein At1g54240;	-	-	-	-	mature pollen grain, pollen tubes, cotyledones of heart stage embryo, weak induction by osmotic and heat stress, weak expression in guard cells and aba1 hypocotyl
25		AT1G54240		A0MEC6	Putative uncharacterized protein	230	gb ABK28439.1	unknown					
26		AT1G54240		Q9SLK8	Putative uncharacterized protein F20D21.6	207	gb AAD25606.1 AC005287_8	Hypothetical protein					
27	GH1-Myb-related8 (SMH15)	AT1G54260.1	winged-helix DNA-binding transcription factor family protein	F4HV94	Winged-helix DNA-binding transcription factor family protein	197	ref NP_175828.1  gb AEE33072.1	winged-helix DNA-binding transcription factor family protein	SMH15	-	-	-	mature pollen
28		AT1G54260		Q67YM4	Putative uncharacterized protein At1g54260	169	dbj BAD44207.1	hypothetical protein					
29		AT1G54260		Q9SLK7	Putative uncharacterized protein F20D21.8	227	gb AAD25607.1 AC005287_9	Hypothetical protein					