

**Table. Validation of Soybean Globular-Stage (GLOB) Compartment-specific Transcription Factors and Transcripts mRNAs Using real-time qRT-PCR**

Affymetrix Probe Sets ID	Gene Description <sup>§</sup>	Stage	REAL-TIME qRT-PCR Fold-Reduction								
			SUS	EP	ES	ENT	II	OI	EPD	HI	
Gma.17347.1.S1_s_at	No-apical-metristem family	GLOB	1	ND	ND	ND	ND	ND	ND	ND	ND
GmaAffx.92851.1.S1_s_at	Putative aldo/keto reductase	GLOB	1	1328*	539*	ND	ND	33341*	ND	1474*	
GmaAffx.92230.1.A1_s_at	OSM34	GLOB	1	99*	5312*	ND	ND	ND	ND	ND	
GmaAffx.6438.3.S1_at	WRKY	GLOB	1	10	ND	ND	ND	ND	ND	32*	
Gma.12356.1.A1_at	Expressed Protein	GLOB	ND	1	ND	ND	ND	ND	ND	521*	
GmaAffx.63050.1.S1_at	STM	GLOB	ND	1	ND	ND	ND	ND	ND	687*	
Gma.13662.1.S1_at	bHLH	GLOB	ND	1	ND	ND	ND	26*	ND	ND	
GmaAffx.34952.1.S1_at	Homeobox-leucine zipper TF	GLOB	ND	1	ND	ND	ND	ND	ND	24	
Gma.7467.1.A1_at	WRKY	GLOB	2	1	ND	ND	ND	117	ND	ND	
GmaAffx.1319.1.S1_at	bHLH	GLOB	ND	1	ND	ND	ND	ND	ND	1	
GmaAffx.16969.1.S1_at	Putative Scarecrow TF	GLOB	2*	1	ND	ND	ND	ND	ND	ND	
GmaAffx.12145.1.S1_at	MYB TF	GLOB	0.3	1	34*	0.3	ND	0.2	ND	2	
Gma.46.1.S1_at	bZIP TF (OBF4)	GLOB	0.3*	1	63#	6	1	1	ND	ND	
Gma.11368.1.S1_at	Hypothetical protein	GLOB	ND	1328*	1	ND	ND	166*	ND	1944*	
GmaAffx.38321.1.S1_at	No-apical-metristem family	GLOB	ND	ND	1	69*	ND	ND	ND	ND	
GmaAffx.2721.2.S1_at	Auxin-responsive factor (ARF8)	GLOB	0.6*	0.5	1	2	ND	10*	ND	0.5	
Gma.12421.2.S1_at	Trithorax 1	GLOB	ND	1	1	ND	ND	ND	ND	2	
Gma.8336.1.S1_at	WRKY	GLOB	0.4	49	1	16	2	36	6*	66	
GmaAffx.4921.1.S1_at	DAG2	GLOB	ND	ND	1	2	8	ND	ND	1	
Gma.16911.1.S1_at	Cytochrome P450 family protein	GLOB	ND	ND	ND	1	ND	ND	ND	ND	
GmaAffx.15062.1.S2_at	SEC14 cytosolic factor family protein	GLOB	24	939	60	1	59	402	518	5997	
GmaAffx.78486.4.S1_at	WRKY	GLOB	2*	ND	52*	1	ND	137	ND	199	
GmaAffx.87279.1.S1_at	Zinc finger (C2H2)	GLOB	ND	4	310*	1	12	ND	ND	33*	
Gma.8546.1.S1_at	Putative fasciclin-like arabinogalactan-protein	GLOB	34*	ND	ND	ND	1	37	ND	ND	
Gma.3409.1.S1_at	Protease inhibitor seed storage/lipid transfer	GLOB	ND	ND	ND	ND	1	ND	ND	ND	
GmaAffx.60479.4.S1_at	Homeodomain-contaiing protein	GLOB	ND	ND	0.8*	2	1	12	ND	ND	
GmaAffx.6306.1.S1_at	MYB61	GLOB	4*	ND	ND	20	1	ND	0.05	113	
GmaAffx.57894.1.S1_at	bZIP TF	GLOB	0.6*	ND	4	2	ND	1	ND	3	
GmaAffx.73708.3.S1_at	Zinc finger (C2H2)	GLOB	2*	ND	ND	ND	5*	1	45*	25	
GmaAffx.85096.1.S1_at	Expressed Protein	GLOB	2*	3*	539	6	20	1	3*	14	
GmaAffx.61110.1.S1_at	Expressed Protein	GLOB	0.7*	ND	5693	5500#	28	1	ND	ND	
GmaAffx.15275.1.A1_at	No homology to known protein	GLOB	71*	ND	ND	ND	ND	ND	1	362	
GmaAffx.15275.1.S1_at	No homology to known protein	GLOB	44*	ND	ND	ND	ND	1783	1	3492	
GmaAffx.42097.1.S1_at	bZIP TF	GLOB	1	ND	ND	ND	ND	ND	1	ND	
Gma.8797.1.A1_at	Expressed Protein	GLOB	42*	45*	ND	ND	ND	212*	ND	1	
Gma.13663.1.S1_at	2OG-Fe(II) Oxygenase family protein	GLOB	60*	100*	1607*	ND	ND	181*	29*	1	
Gma.13444.1.S1_at	PIF4/bHLH9/SRL2	GLOB	ND	9*	ND	ND	ND	ND	ND	1	
Gma.7407.1.S1_at	AUX/IAA TF	GLOB	ND	ND	ND	ND	ND	10*	ND	1	
GmaAffx.39781.1.S1_at	Zinc finger (C2H2)	GLOB	ND	ND	ND	ND	ND	ND	ND	1	
GmaAffx.69887.1.A1_at	Zinc finger (C3HC4)	GLOB	20	10	2353	26	2	356	ND	1	
GmaAffx.87757.1.S1_at	MYB48	GLOB	0.8*	ND	ND	ND	ND	ND	ND	1	
Gma.3799.1.S1_at	Ethylene-responsive family protein	GLOB	1*	3670	ND	3016	ND	972#	ND	1	

§ Gene Description were taken from our annotation.

\* detected in one of two biological replicates.

# detected in one of four qRT-PCR reactions