

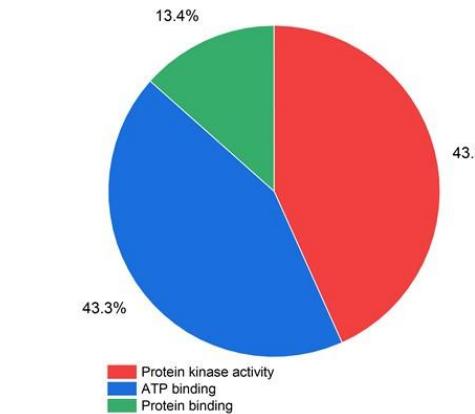
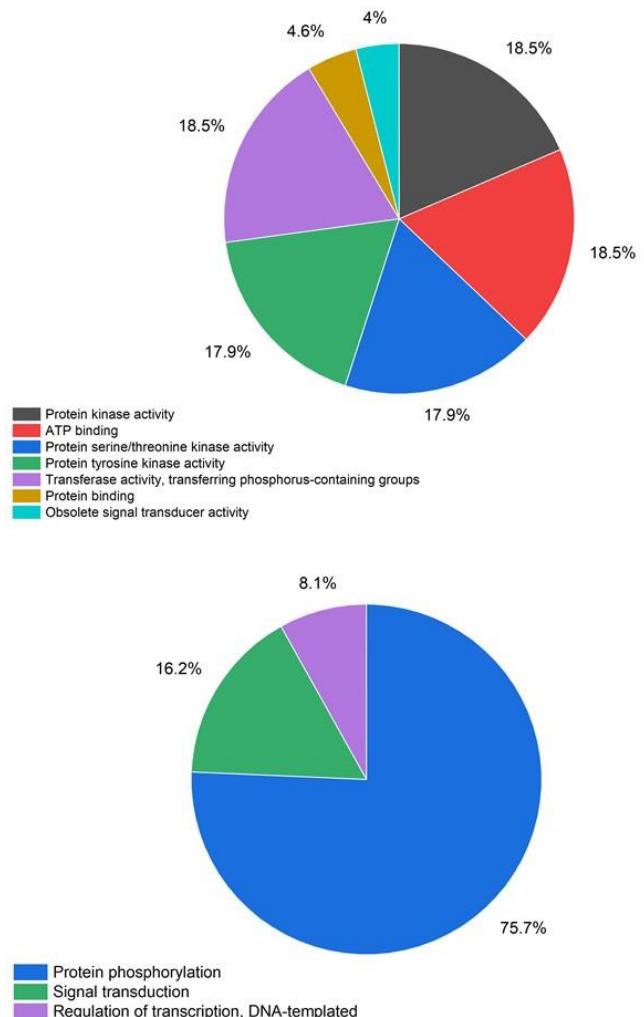
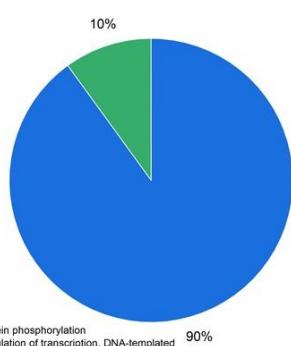
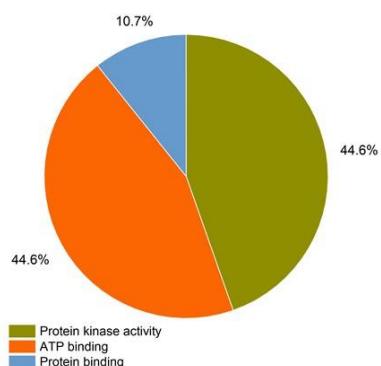
a**b****c**

Figure S1. Analysis of RAF gene ontology to study molecular and biological functions (A) *G. arboreum* (B) *G. raimondii* (C) *G. barbadense*:

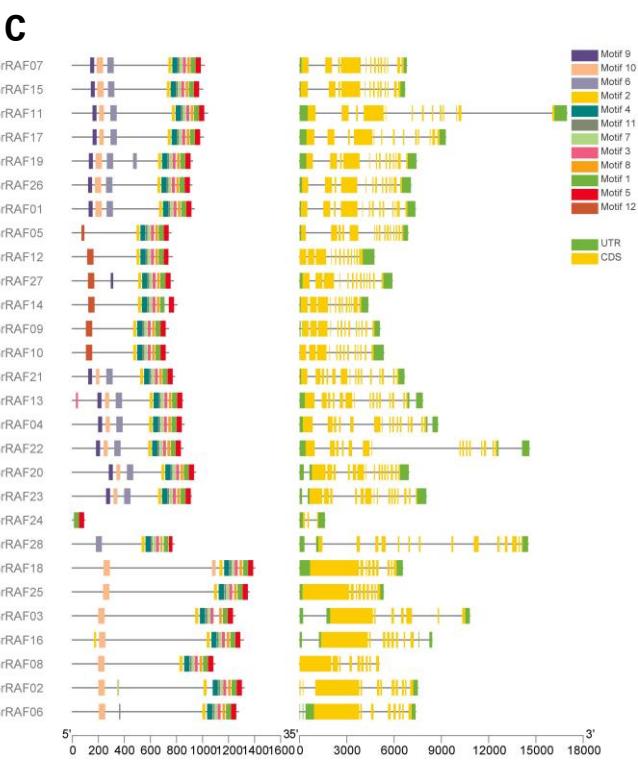
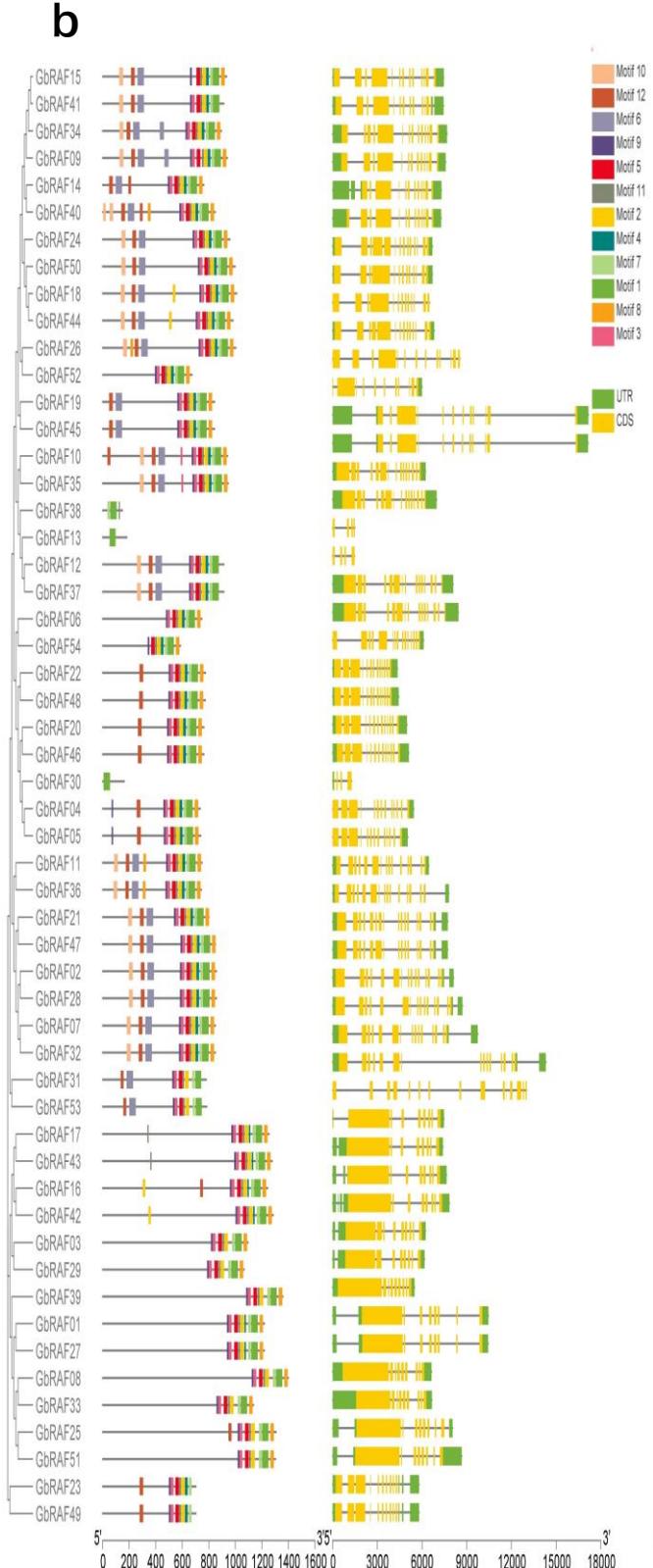
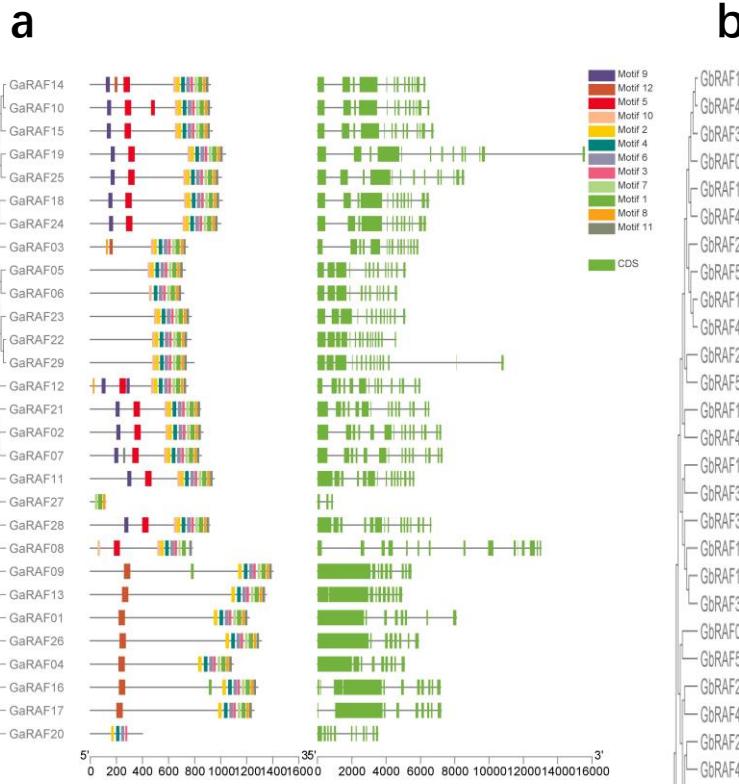


Figure S2: Phylogenetic tree, Motif and Gene structure of RAF gene Family of cotton (A) *G. arboreum* (b) *G. barbadense* (c) *G. raimondii*

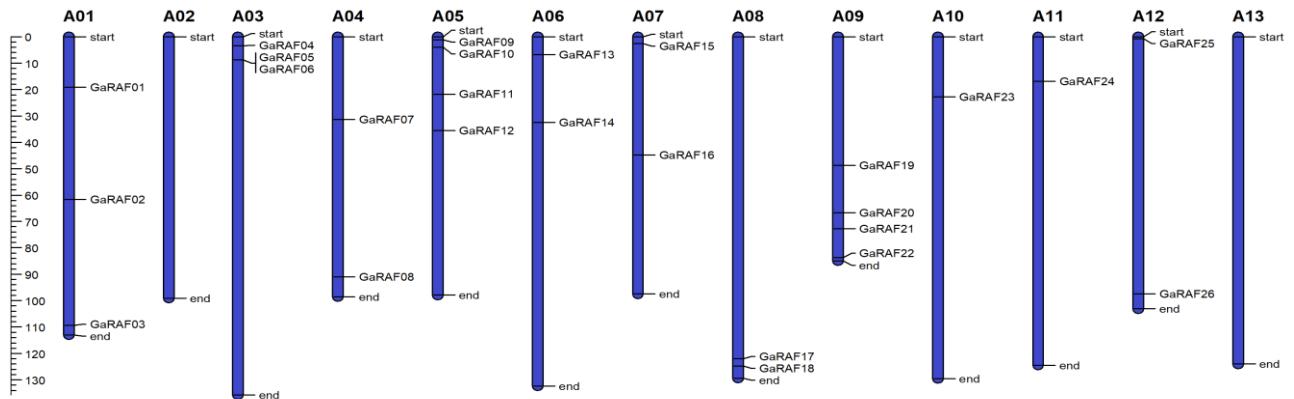
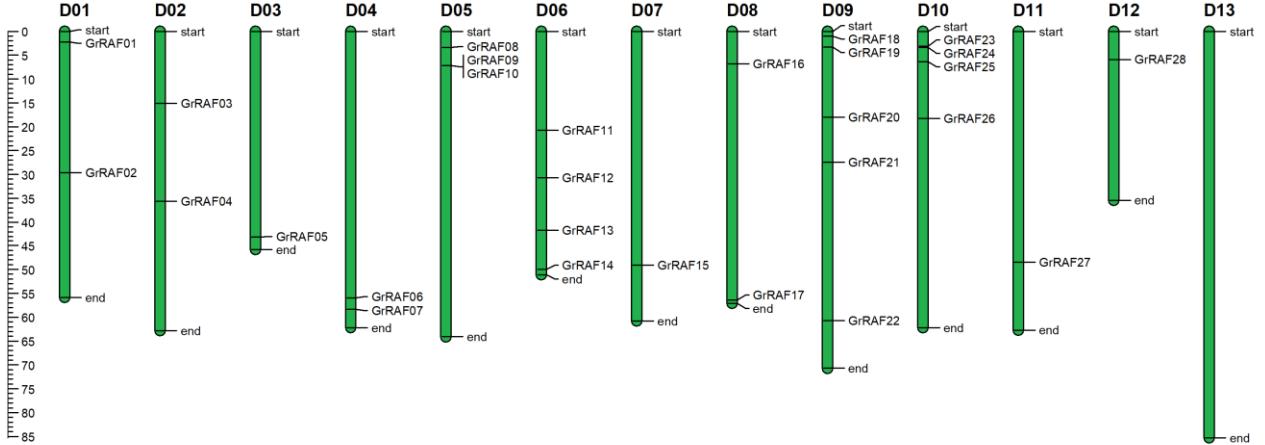
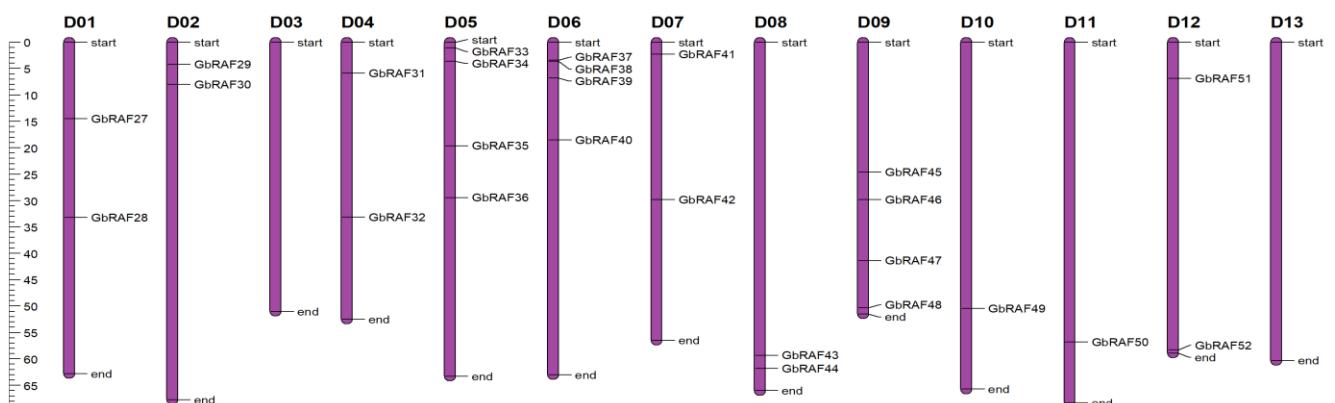
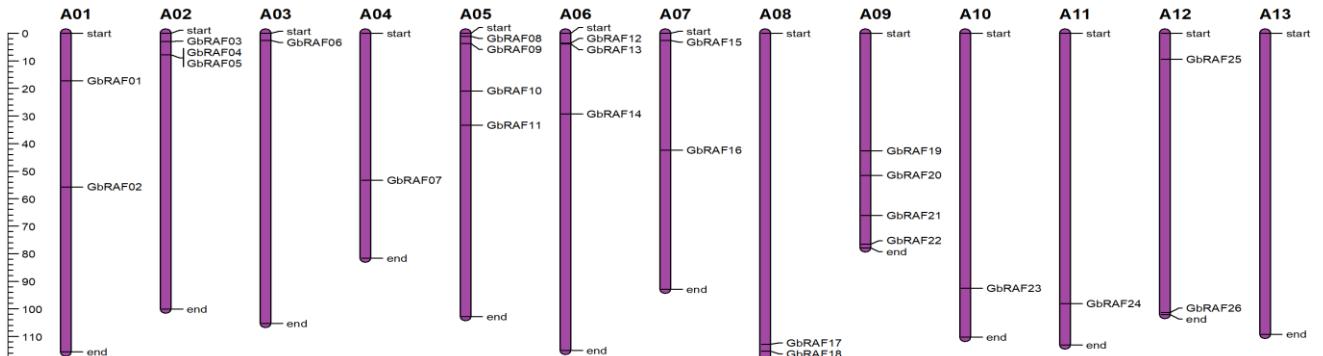
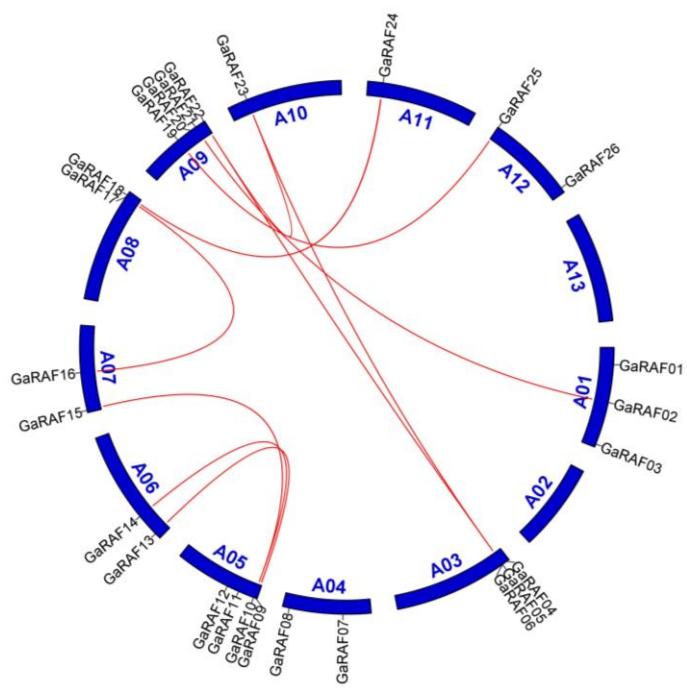
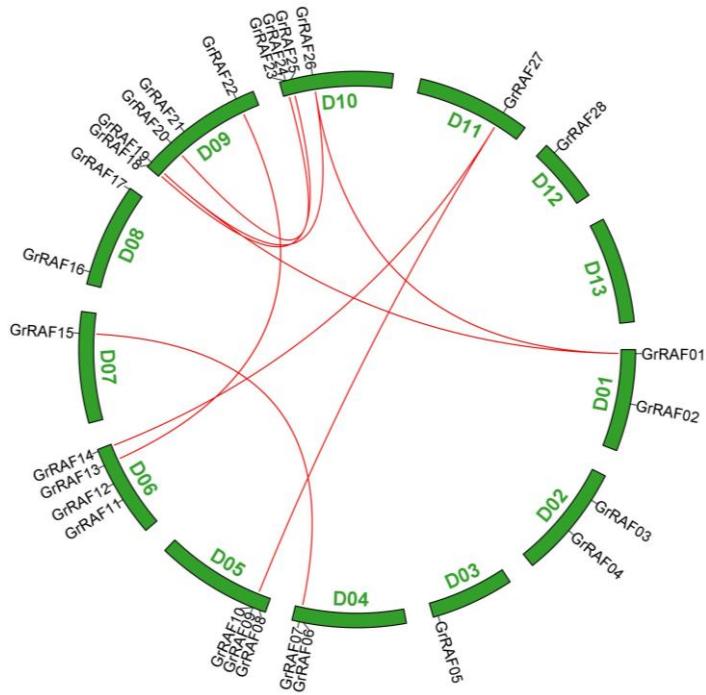
a**b****c**

Figure S3. Chromosomal map of RAF gene family of cotton (A) *G. arboreum* (B) *G. raimondii* (c) *G. barbadense*

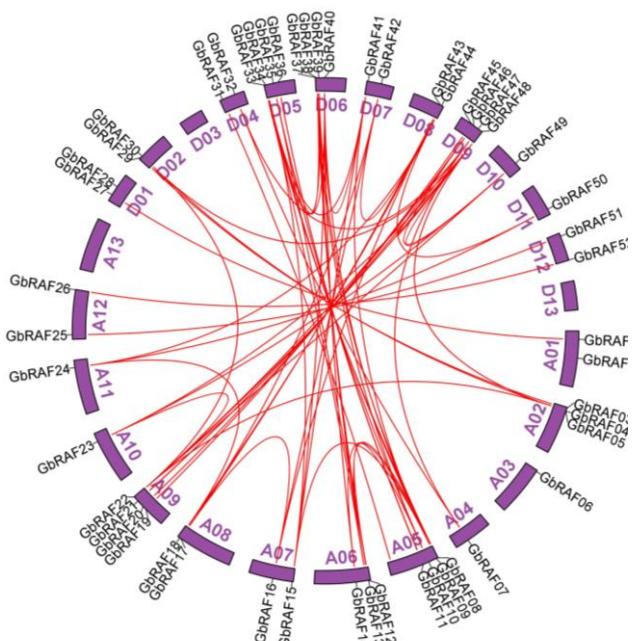
a



b



c



d

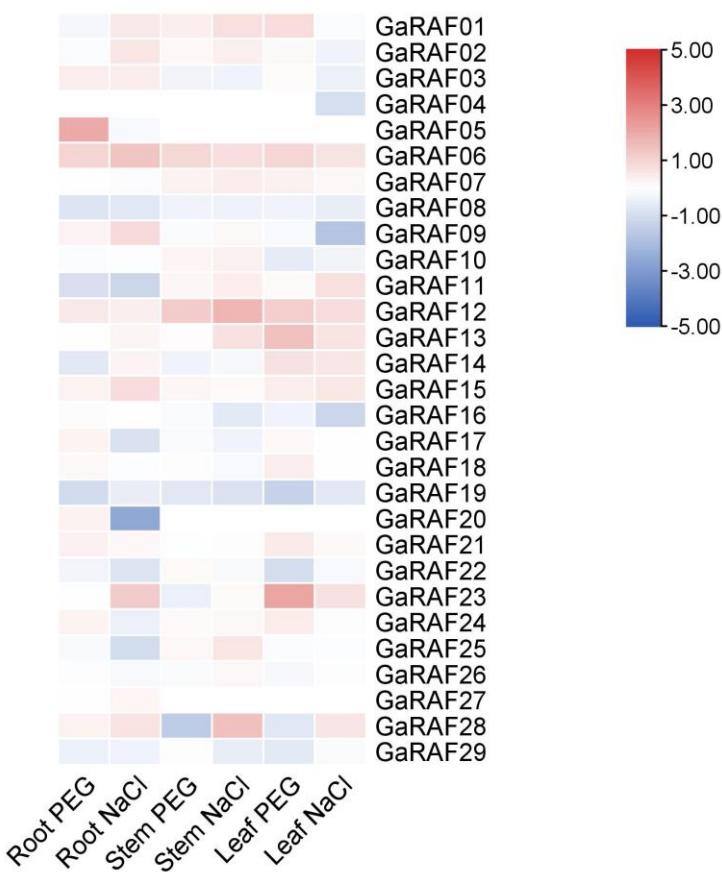


Figure S4: Collinearity and expression analysis of RAF gene family in cotton
(a) *G. arboreum* (b) *G. raimondii* (c) *G. barbadense* (d) Expression analysis of *G. arboreum*

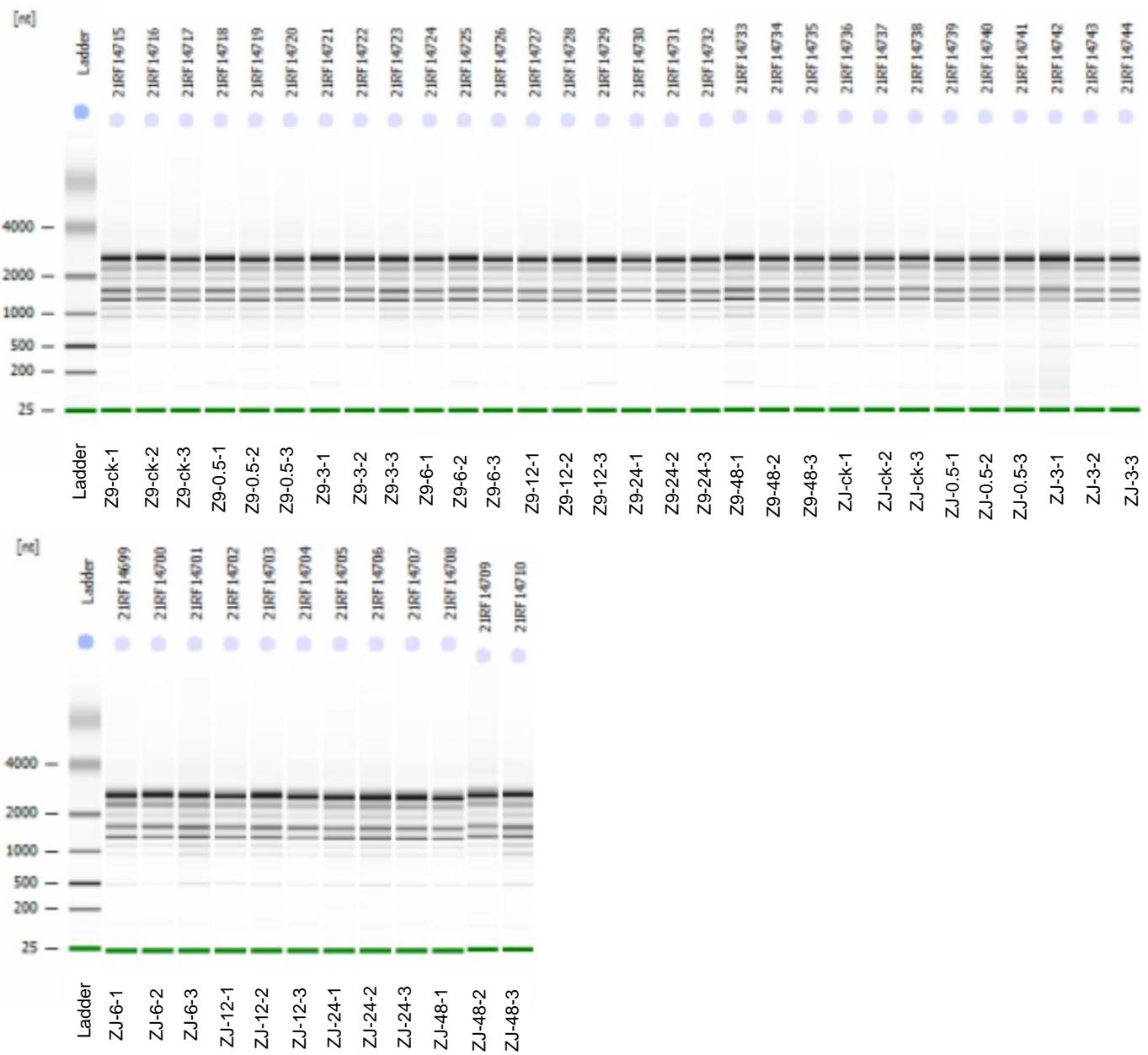
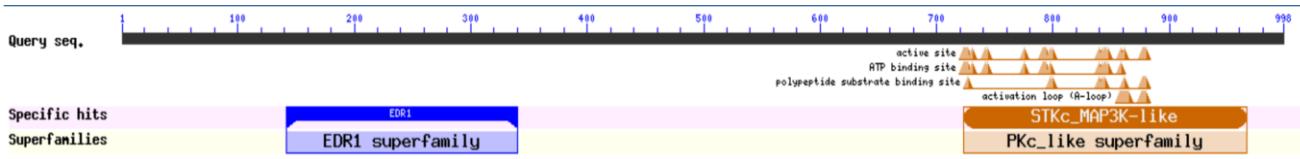


Figure S5: Analysis of the quantity, integrity and purity of total RNA for 42 leaf samples with the Agilent 2100 Bioanalyzer for qRT-PCR and RNA-seq. CK means NaCl-untreated as control. 0.5h-48h means different time points after NaCl stress. Z9:Z9807; ZJ:ZJ0102.

a



b

AT1G08720_1	PRLRHPNVVFFLIGAVTRPP	NLSIVTEFLP		747
GbRAF24	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		757
GaRAF24	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		797
GhRAF25	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		795
GhRAF42	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		795
GbRAF50	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		797
GhRAF02	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		797
GrRAF15	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		797
GaRAF18	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		809
GbRAF18	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		809
GhRAF10	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		809
GrRAF07	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		810
GbRAF44	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		781
GhRAF24	RRLRHPNVVLFMGAVTRPP	NLSIITEFLP		810
AT5G49470_2	KRLRHPNVLLFMGAVTSPQ	RLCIVTEFLP		566
AT1G67890_1	KRLRHPNVLLFMGAVASPQ	RLCIVTEFLP		565
AT3G06620_1	KRLRHPNVLLFMGAVTSPQ	RLCIVSEFLP		572
Consensus	rllrhpnv	f gav p l i eflp		
AT1G08720_1	RIKMALDVAMGMNCLHTSIE	TIVHRDLKTENLVD		801
GbRAF24	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		811
GaRAF24	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		851
GhRAF25	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		849
GhRAF42	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		849
GbRAF50	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		851
GhRAF02	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		851
GrRAF15	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		851
GaRAF18	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		863
GbRAF18	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		863
GhRAF10	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		863
GrRAF07	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		864
GbRAF44	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		835
GhRAF24	RIKMALDVARGMNC	TIVHRDLKSPNLLVD		864
AT5G49470_2	MLHIFTLYFAQARGMNYLHHCTP	PIIHRDLKSSSNLLVD		684
AT1G67890_1	RIHMASDIARGMNYLHHCSPE	PIIHRDLKSSSNLLVD		619
AT3G06620_1	RIHMALDIARGMNYLHHCSPE	PIIHRDLKSNSNLLVD		626
Consensus	a gmn lh p i hrdlk nllvd			
AT1G08720_1	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWRGMN		871
GbRAF24	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWSGMN		881
GaRAF24	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWSGMN		921
GhRAF25	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWSGMN		919
GhRAF42	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWSGMN		919
GbRAF50	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWSGMN		921
GhRAF02	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWSGMN		921
GrRAF15	APEVLRNEP	SNEKCDVYSFGVILWELATLRLIPWSGMN		921
GaRAF18	APEVLRNEP	SNEKCDVYSFGVILWEIATLRLIPWSGMN		933
GbRAF18	APEVLRNEP	SNEKCDVYSFGVILWEIATLRLIPWSGMN		933
GhRAF10	APEVLRNEP	SNEKCDVYSFGVILWEIATLRLIPWSGMN		933
GrRAF07	APEVLRNEP	SNEKCDVYSFGVILWEIATLRLIPWSGMN		934
GbRAF44	APEVLRNEP	SNEKCDVYSFGVILWEIATLRLIPWSGMN		905
GhRAF24	APEVLRNEP	SNEKCDVYSFGVILWEIATLRLIPWSGMN		934
AT5G49470_2	APEVLRNEA	ADEKSDVYSFGVILWEIATLRLIPWSGMN		754
AT1G67890_1	APEVLRNEA	ADEKSDVYSFGVILWELEVTEKIPWESLN		688
AT3G06620_1	APEVLRNES	ADEKSDIYSFGVILWELEVTEKIPWENLN		696
Consensus	apevlrne	ek d ysfg lwe t pw n		

Figure S6: *GhRAF* gene cloning, conserved domain database and sequence alignment analysis (A) Conserved domain database analysis of GhRAF42 (E) Multiple sequence alignment of GhRAF42