

		10	20	30	40	50	60	
V	Pg	PgERF014	RVLGRRRPPSRWVAE	IKD.T....IQKTR	VWLGTFDTAE	ARAYDEAAACLLR	FN.TRTMFC	58
		PgERF040	KFVGRRRPPSRWVAE	IKN.T....SQKTR	VWLGTFDTAE	ARAYDEAAACLLR	GN.TRTMFW	58
		PgERF049	KFRGRRRPPSRWVSE	IRH.P....LLKTR	VWLGTFETAED	ARAYDEAAVLMSSR	GN.AKTNFP	58
		PgERF060	RYRGRRRPPSRWVSE	IRH.P....LLKTR	VWLGTFETAED	ARAYDEAARLMGSR	GR.ARTNFD	58
		PgERF085	RYRGRRRPPSRWVSE	IRH.P....LLKTR	VWLGTFETAED	ARAYDEAARLMGSR	GR.AKTNFP	58
	At	AT1G15360	RFLGRRRPPSRWVAE	IKD.T....IQKTR	VWLGTFDTAE	ARAYDEAAACLLR	GN.TRTMFW	58
		AT5G19790	KFVGRRRPPSRWVAE	IKD.T....TQKTR	VWLGTFETAED	ARAYDEAAACLLR	GN.TRTMFA	58
		AT5G25190	RFRGRRRPPSRWVSE	IRH.P....LLKTR	VWLGTFETAED	ARAYDEAARLMGSR	GR.AKTNFP	58
		AT5G11190	KFRGRRRPPSRWVSE	IRH.P....LLKTR	VWLGTFETAED	ARAYDQAALLMNGR	GN.AKTNFP	58
		AT5G25390	KFRGRRRPPSRWVSE	IRH.P....LLKTR	VWLGTFDTAET	ARAYDQAALLMNGR	GN.AKTNFP	58
VI	Pg	PgERF127	KFRGRRRPPSRWVAE	IKD.P....LRHV	VWLGTYDTAE	AMVYDHAAIKIR	EPD.ALTNFP	58
		PgERF130	KFRGRRRPPSRWVAE	IKD.P....TRRV	VWLGTYDTAE	AMVYDHAAIKIR	EPD.ALTNFP	58
		PgERF153	KYRGRRRPPSRWVAE	IKD.P....SRRR	VWLGTYDTAE	ALVYDAAAIQIR	EPD.ALTNFL	58
		AT4G11140	KFRGRRRPPSRWVAE	IKD.P....SRRV	VWLGTFDTAE	ALVYDAAAIQIR	EPN.AELNFP	58
		AT4G23750	KFRGRRRPPSRWVAE	IKD.P....LKRVR	VWLGTYNTAE	AMVYDAAAIQIR	EPD.ALTNFS	58
	At	AT5G53290	KFRGRRRPPSRWVAE	IKD.P....EQRFR	VWLGTFETAED	ALVYDAAAIQIR	EPD.ALTNFS	58
		AT4G27950	KYRGRRRPPSRWVAE	IKD.P....EQRFR	VWLGTFETAED	ALVYDAAAIQIR	EPD.ALTNFT	58
		AT3G61630	KYRGRRRPPSRWVAE	IKD.P....SSRT	VWLGTFVTAED	ALVYDRAAIHLR	EPK.ALTNFL	58
		AT2G46310	KYRGRRRPPSRWVAE	IKD.P....SSRT	VWLGTFETAED	ALVYDRAAIHLR	EPK.ALTNFL	58
		AT1G22985	KFRGRRRPPSRWVAE	IKD.P....VKGRR	VWLGTFETAED	ALVYDAAAIQIR	EPD.AFTNFG	61
AT1G71130	KYRGRRRPPSRWVAE	IKD.P....RCGRGACKGR	RLVWLGTFNTAE	ALVYDAAAIQIR	EPK.AFTNFG	63		
VII	Pg	PgERF087	KYRGRRRPPSRWVAE	IKD.P....QKGV	VWLGTFNTAE	ARAYDAAARRIR	EPK.KLNFP	58
		PgERF138	QYRGRRRPPSRWVAE	IKD.P....RKGVR	VWLGTFNTAE	ARAYDSEARRIR	EPK.KVNFP	58
		PgERF156	QFRGRRRPPSRWVAE	IKD.P....RKGVR	VWLGTYNSAE	ARAYDSEARRIR	EPK.KVNFP	58
		AT2G47520	LYRGRRRPPSRWVAE	IKD.P....SKGV	VWLGTFKTAED	AMVYDVAARIKIR	EPK.KAPKLNFP	59
		AT3G16770	VYRGRRRPPSRWVAE	IKD.P....RKGVR	VWLGTFNTAE	AMVYDVAARIKIR	EPK.KAPKLNFP	59
	At	AT1G72360	RYRGRRRPPSRWVAE	IKD.P....IKGV	VWLGTFNTAE	ARAYDLEARRIR	EPK.KAPKLNFP	59
		AT1G53910	KYRGRRRPPSRWVAE	IKD.P....REGAR	VWLGTFKTAED	ARAYDAAARRIR	EPK.KVNFP	58
		AT3G14230	QYRGRRRPPSRWVAE	IKD.P....RKGSR	VWLGTFDTAE	ARAYDAAARRIR	EPK.KVNFP	58
		PgERF081	HFRGRRRPPSRWVAE	IKD.P....WKTR	VWLGTFETAED	ARAYDAAARRIR	EPK.AKTNFP	58
		PgERF105	HFRGRRRPPSRWVAE	IKD.P....SKKSR	VWLGTFDTAE	ARAYDAAARRIR	EPK.AKTNFP	58
VIII	Pg	PgERF106	RYRGRRRPPSRWVAE	IKD.P....WKTR	VWLGTFDSAED	ARAYDAAARRIR	EPK.AKTNFP	58
		PgERF117	RYRGRRRPPSRWVAE	IKD.P....GKKSR	VWLGTFDTAE	ARAYDAAARRIR	EPK.AKTNFP	58
		PgERF119	HFRGRRRPPSRWVAE	IKD.P....GKKSR	VWLGTFDTAE	ARAYDAAARRIR	EPK.AKTNFP	58
		PgERF123	RFRGRRRPPSRWVAE	IKD.P....WKTR	VWLGTFDSAED	ARAYDAAARRIR	EPK.AKTNFP	58
		PgERF152	HFRGRRRPPSRWVAE	IKD.P....SKKSR	VWLGTFDTAE	ARAYDAAARRIR	EPK.AKTNFP	58
	At	AT2G47520	LYRGRRRPPSRWVAE	IKD.P....SKGV	VWLGTFKTAED	AMVYDVAARIKIR	EPK.KAPKLNFP	59
		AT3G16770	VYRGRRRPPSRWVAE	IKD.P....RKGVR	VWLGTFNTAE	AMVYDVAARIKIR	EPK.KAPKLNFP	59
		AT1G72360	RYRGRRRPPSRWVAE	IKD.P....IKGV	VWLGTFNTAE	ARAYDLEARRIR	EPK.KAPKLNFP	59
		AT1G53910	KYRGRRRPPSRWVAE	IKD.P....REGAR	VWLGTFKTAED	ARAYDAAARRIR	EPK.KVNFP	58
		AT3G14230	QYRGRRRPPSRWVAE	IKD.P....RKGSR	VWLGTFDTAE	ARAYDAAARRIR	EPK.KVNFP	58
IX	Pg	PgERF036	KYRGRRRPPSRWVAE	IKD.P....RQGV	VWLGTFNTAE	ARAYDRAAYMR	EPK.AVLNFP	59
		PgERF038	RHRGRRRPPSRWVAE	IKD.P....RNGGR	VWLGTFETAED	ARAYDRAAYMR	EPK.AVLNFP	59
		PgERF046	RYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYDTPED	ALVYDRAAAYMR	EPK.AKVNFP	59
		PgERF047	RYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYDTPED	ALVYDRAAAYMR	EPK.AKVNFP	59
		PgERF050	AYRGRRRPPSRWVAE	IKD.P....RNGVR	VWLGTFDTAE	ALVYDQAAYMR	EPK.AVLNFP	59
	At	PgERF051	SYRGRRRPPSRWVAE	IKD.P....RNGVR	VWLGTFDSAED	ALVYDQAAYMR	EPK.AVLNFP	59
		PgERF057	HYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTYENAE	ALVYDRAAAYMR	EPK.AVLNFP	59
		PgERF058	RYRGRRRPPSRWVAE	IKD.P....RNGIR	VWLGTFDSAED	ALVYDQAAYMR	EPK.AVLNFP	59
		PgERF066	QYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYDTPED	ALVYDRAAAYMR	EPK.AVLNFP	59
		PgERF074	RYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYDTPED	ALVYDRAAAYMR	EPK.AVLNFP	59
X	Pg	PgERF080	RYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYETPED	ALVYDRAAAYMR	EPK.AVLNFP	59
		PgERF083	KYRGRRRPPSRWVAE	IKD.P....RNGAR	VWLGTFSTGEE	ARAYDRAAAYMR	EPK.AVLNFP	59
		PgERF086	RYRGRRRPPSRWVAE	IKD.P....RHGAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.AVLNFP	59
		PgERF091	RYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYETPED	ALVYDRAAAYMR	EPK.AVLNFP	59
		PgERF094	HYRGRRRPPSRWVAE	IKD.P....RKGR	VWLGTFDIAVD	ARAYDRAAAYMR	EPK.AVLNFP	59
	At	PgERF095	HYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.AVLNFP	59
		PgERF096	AYRGRRRPPSRWVAE	IKD.P....RNGIR	VWLGTFDSAED	ALVYDQAAYMR	EPK.AVLNFP	59
		PgERF097	HYRGRRRPPSRWVAE	IKD.P....RKGSR	VWLGTFDTAE	ALVYDRAAAYMR	EPK.AVLNFP	59
		PgERF098	AYRGRRRPPSRWVAE	IKD.P....RNGIR	VWLGTFDSAED	ALVYDQAAYMR	EPK.AVLNFP	59
		PgERF099	RYRGRRRPPSRWVAE	IKD.P....RNGIR	VWLGTFDSAED	ALVYDQAAYMR	EPK.AVLNFP	59
At	PgERF102	HYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.AVLNFP	59	
	PgERF111	HYRGRRRPPSRWVAE	IKD.P....RRGSR	VWLGTYETPED	ALVYDRAAAYMR	EPK.AVLNFP	59	
	PgERF141	RFRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYETPED	ALVYDRAAAYMR	EPK.AVLNFP	59	
	PgERF146	HYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTYETPED	ALVYDRAAAYMR	EPK.AVLNFP	59	
	PgERF150	RYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYDTPED	ALVYDRAAAYMR	EPK.AVLNFP	59	
X	Pg	PgERF157	RYRGRRRPPSRWVAE	IKD.P....RQGAR	VWLGTFETAED	ARAYDRAAAYMR	EPK.AVLNFP	59
		AT4G18450	KYRGRRRPPSRWVAE	IKD.P....RNGVR	VWLGTFQTAED	ALVYDRAAAYMR	EPK.AVLNFP	60
		AT3G23240	SYRGRRRPPSRWVAE	IKD.P....RNGIR	VWLGTFESAED	ALVYDQAAYMR	EPK.AVLNFP	59
		AT2G31230	SYRGRRRPPSRWVAE	IKD.P....RNGIR	VWLGTFDKAED	ALVYDQAAYMR	EPK.AVLNFP	59
		AT1G06160	SYRGRRRPPSRWVAE	IKD.P....RKGR	VWLGTFDTAE	ALVYDQAAYMR	EPK.AVLNFP	59
	At	AT3G23220	KYRGRRRPPSRWVAE	IKD.P....RHGAR	VWLGTFNTAE	ARAYDRAAAYMR	EPK.AVLNFP	59
		AT5G43410	KYRGRRRPPSRWVAE	IKD.P....KHGR	VWLGTFDTAE	ARAYDRAAAYMR	EPK.AVLNFP	59
		AT1G04370	KYRGRRRPPSRWVAE	IKD.P....KHGR	VWLGTFDTAE	ARAYDRAAAYMR	EPK.AVLNFP	59
		AT3G23230	RFRGRRRPPSRWVAE	IKD.P....RNGAR	VWLGTFETAED	ARAYDRAAAYMR	EPK.AVLNFP	59
		AT2G44840	QYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTYETPED	ALVYDRAAAYMR	EPK.AVLNFP	59
At	AT4G17500	HYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.AVLNFP	59	
	AT5G47220	HYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.AVLNFP	59	
	AT5G47230	HYRGRRRPPSRWVAE	IKD.P....KNGAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.AVLNFP	59	
	AT4G17490	HYRGRRRPPSRWVAE	IKD.P....RRGR	VWLGTFETAED	ARAYDRAAAYMR	EPK.AVLNFP	59	
	AT5G61600	HYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTYDTPED	ALVYDRAAAYMR	EPK.AVLNFP	59	
At	AT5G07580	HYRGRRRPPSRWVAE	IKD.P....KKGGR	VWLGTFESVD	ARAYDCAAFMR	EPK.AVLNFP	59	
	AT5G61590	HYRGRRRPPSRWVAE	IKD.P....KKGSR	VWLGTFESDID	ARAYDCAAFMR	EPK.AVLNFP	59	
	PgERF033	NYRGRRRPPSRWVAE	IKD.P....RKAAR	VWLGTFETAED	ARAYDRAAAYMR	EPK.KLNFP	58	
	PgERF054	NYRGRRRPPSRWVAE	IKD.P....RNAAR	VWLGTFETAED	ARAYDRAAAYMR	EPK.KLNFP	58	
	PgERF136	HYRGRRRPPSRWVAE	IKD.P....VKAA	VWLGTFDTAE	ALVYDRAAAYMR	EPK.KLNFP	58	
At	AT1G43160	KYRGRRRPPSRWVAE	IKD.P....HKAT	VWLGTFETAED	ARAYDRAAAYMR	EPK.KLNFP	58	
	AT4G34410	GYRGRRRPPSRWVAE	IKD.P....KRAAT	VWLGTFETAED	ARAYDRAAAYMR	EPK.KLNFP	58	
	AT5G00800	RYRGRRRPPSRWVAE	IKD.P....HRAAT	VWLGTFDTAE	ARAYDRAAAYMR	EPK.KLNFP	58	
	AT5G64750	RYRGRRRPPSRWVAE	IKD.P....FKAA	VWLGTFDTAE	ARAYDRAAAYMR	EPK.KLNFP	58	
	AT2G33710	NYRGRRRPPSRWVAE	IKD.P....NKAA	VWLGTFDTAE	ARAYDRAAAYMR	EPK.KLNFP	58	
At	AT5G13330	HYRGRRRPPSRWVAE	IKD.P....KKAAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.KLNFP	58	
	AT5G61890	HYRGRRRPPSRWVAE	IKD.P....KKAAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.KLNFP	58	
	AT5G07310	HYRGRRRPPSRWVAE	IKD.P....QRAAR	VWLGTFETAED	ALVYDRAAAYMR	EPK.KLNFP	58	

YRG element

RAYD element

S5 Fig. Comparison of the amino acid sequences of the AP2 domains of the ERF subfamily proteins from ginseng and Arabidopsis. The black background represents the conserved amino acid residues, with 100% similarity. The conserved YRG and RAYD elements are indicated by brackets.