

Supplementary Figure 1

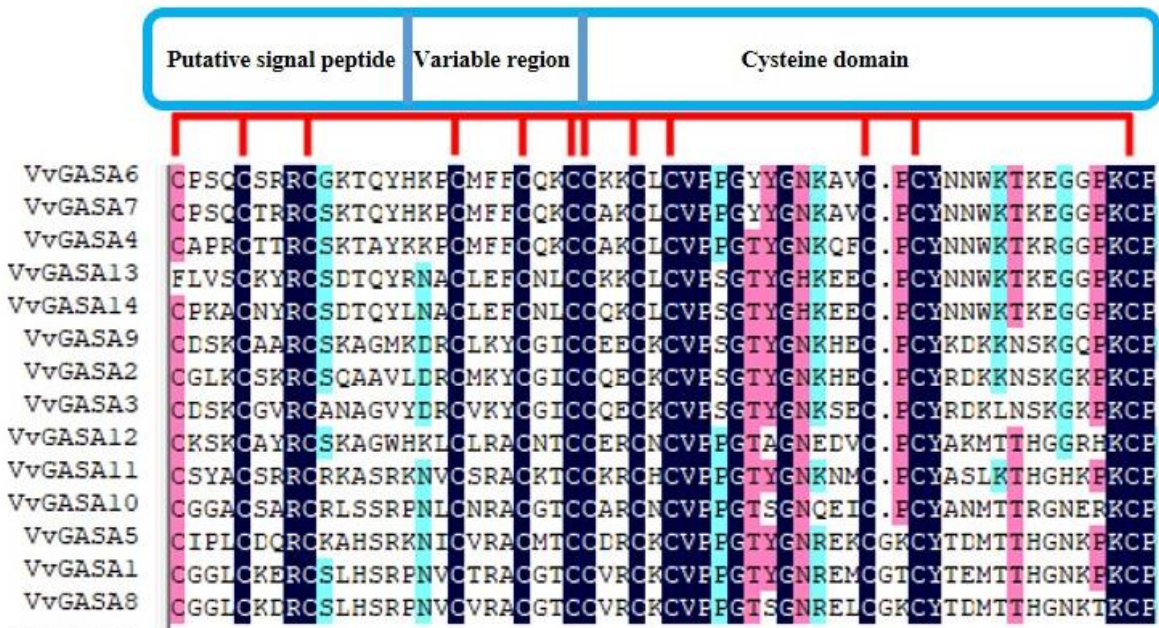


Table S1: Tandem duplication events in grapes GASAgenes

Cluster number	Chromosome	Gene	Start Site	End Site
1	18	VvGASA11	20718815	20720279
	18	VvGASA12	20720304	20720676
2	Un-	VvGASA13	9775242	9775609
	Un-	VvGASA14	9791751	9792551

Table S2: Synteny blocks of GASA genes within grape genome

Region 1 (Grape)				Region 2 (Grape)			Gene in the synteny region	
ID①	Chr	Start	Stop	Chr	Start	Stop	Gene 1	Gene 2
53	17	5814755	7662326	14	28457051	30137019	VvGASA7	VvGASA6
56	17	8423634	11518764	14	26536960	28478988	VvGASA8	VvGASA5
62	18	6826940	8000941	3	6548597	8827504	VvGASA9	VvGASA2
113	7	15058884	16256503	18	7338029	8296810	VvGASA3	VvGASA9

Table S3: Primer sequences used in expression analysis of GASA genes in grape

Gene	Forward and reverse primer sequence (5'~3')	
VvGASA1	F	GGCTTCTGCCTTTCTTGGA
	R	GGTGGTCATCTCGGTGTAG
VvGASA2	F	CTCCCTTCTCCTTCACTCC
	R	GCTTGTTCCTACGTCC
VvGASA3	F	GGTCCACCCACCACAGC
	R	GCACCTCACCCCACACTT
VvGASA4	F	CTCCACAGCCCCAACA
	R	AGGCACGCACAAGCACT
VvGASA5	F	CCAGCAATGAGGAGTAGGT
	R	GGTGTCTTGTCTTTTGGATAGT
VvGASA6	F	TCTCTTGGCTCTTCTCGC
	R	GGAACGCACAGGCACTT
VvGASA7	F	GAATCCAAATCAAGCCAC
	R	GGACCATACGACCCACTG
VvGASA8	F	CAAGACATAGATTGCGGAGG
	R	CGACCCAGTTGGAAGAGAC
VvGASA9	F	TCTCCACCTGCCTTATTC
	R	GAGGGGCTTCATCTTTCT
VvGASA10	F	AATGGATTGCGGGGAG
	R	TCATGTTGGCGTAGCAGG
VvGASA11	F	CCTCTTCTTCACCCACTTTC
	R	CATCTCTGCTTTCATCCACACT
VvGASA13	F	TTATTTCTTGTGTCATGCA
	R	ACCCTCCTTGGTCTTCC
VvActin	F	GATTCTGGTGATGGTGTGAGT
	R	GACAATTTCCCGTTCAGCAGT