

## Anti-DELLA protein RGA antibody

Catalog: PHY0243S

### **Product Information**

# **Description:**

#### Rabbit polyclonal antibody

Background:

RGA is a member of the VHIID/DELLA regulatory family. Contains homopolymeric serine and threonine residues, a putative nuclear localization signal, leucine heptad repeats, and an LXXLL motif. Putative transcriptional regulator repressing the gibberellin response and integration of phytohormone signalling. DELLAs repress cell proliferation and expansion that drives plant growth. The protein undergoes degradation in response to GA via the 26S proteasome. RGA1 binds to PIF3 and inhibits its DNA binding activity and thus affects the expression of PIF3 regulated genes. RGA may be involved in reducing ROS accumulation in response to stress by up-regulating the transcription of superoxide dismutases. Represses GA-induced vegetative growth and floral initiation. Rapidly degraded in response to GA. Involved in fruit and flower development.

Synonyms:	RGA1/2, REPRESSOR OF GA	
Immunogen:	KLH-conjugated synthetic peptide (16 aa from C terminal section) derived from	
	Arabidopsis thaliana RGA 1(AT2G01570) and RGA 2 (AT1G14920).	
Form:	Lyophilized	
Quantity:	150 µg	
Purification:	Serum	
	Peptide affinity form antibody available upon request at <u>info@phytoab.com</u> .	
Reconstitution:	Reconstitution with 150 µl of sterile water.	
	"Note: please spin tube briefly prior to opening it to avoid any losses that might	
	occur from lyophilized material adhering to the cap or sides of the tube".	
Stability &	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
Storage:	12 months from date of receipt, -20 to -70 $^\circ C$ as supplied.	
	6 months, -20 to -70 $^\circ$ C under sterile conditions after reconstitution.	
	1 month, 2 to 8 $^\circ C$ under sterile conditions after reconstitution.	
Shipping:	The product is shipped at 4 $^\circ\!\!{ m C}$ . Upon receipt, store it immediately at the	
	temperature recommended above.	

Research Use Only



## **Application Information**

<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000)
	Note: Optimal dilutions/concentrations should be determined by the
	end user.
Expected / apparent MW:	64 kDa (AT2G01570), 59 kDa (AT1G14920)
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used
	for immunization is 100% homologues with the sequence in
	Gossypium raimondii, Populus trichocarpa, Vitis vinifera, Brassica
	rapa, Brassica napus, Medicago truncatula, and 80-99% homologues
	with the sequence in Triticum aestivum, Oryza sativa, Zea mays,
	Sorghum bicolor, Setaria viridis, Panicum virgatum, Hordeum
	vulgare, Nicotiana tabacum, Cucumis sativus, Glycine max.
	The sequence of the synthetic peptide used for immunization is $94\%$
	homologues with the sequence in RGL1 (AT1G66350); 81%
	homologues with the sequence in RGL2 (AT3G03450), RGL3
	(AT5G17490).
	For more species homologues information, please contact tech

## **Application Example**



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 44 kDa.

Electrophoresis: 12% SDS-PAGE

Transfer: blotting to NC (nitrocellulose) membrane for 1 h.

**Blocking:** 5% skim milk at RT or  $4^{\circ}$ C for 1 h.

Primary antibody: 1:1000 dilution overnight at 4°C.

support at tech@phytoab.com.

**Secondary antibody:** 1:10000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

**Detection:** using chemiluminescence substrate and image were captured with CCD camera.

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