

Anti-Gamma glutamylcysteine synthase antibody

Catalog: PHY0136A

Product Information

| Description: | Rabbit polyclonal antibody | | | | |
|-----------------|---|--|--|--|--|
| Background: | Gamma-Glutamylcysteine synthetase is one of the enzymes of glutathione | | | | |
| | (GSH) synthesis. It seems to play an important role in controlling the | | | | |
| | expression of resistance responses like the regulation of salicylic acid (SA) and | | | | |
| | phytoalexin (camalexin) production. It is Also participates in the detoxification | | | | |
| | process, the antioxidant response and is essential for embryo development and | | | | |
| | proper seed maturation. | | | | |
| Synonyms: | GSH1, Gamma-ECS, ATECS1, ATGSH1, CAD2, CADMIUM SENSITIVE 2, | | | | |
| | GLUTAMATE-CYSTEINE LIGASE, GSHA, PAD2, PHYTOALEXIN DEFICIENT | | | | |
| | 2, RML1, ROOT MERISTEMLESS 1 | | | | |
| Immunogen: | KLH-conjugated synthetic peptide of GSH1 derived from Arabidopsis thaliana | | | | |
| | AT4G23100. | | | | |
| Form: | Lyophilized | | | | |
| Quantity: | 150 µg | | | | |
| Purification: | Immunogen affinity purified | | | | |
| Reconstitution: | Reconstitution with 150 μl of 0.01 M sterile PBS. | | | | |
| | "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 $4^\circ\!\mathrm{C}$. Upon receipt, store it immediately at the | | | | |
| | temperature recommended above. | | | | |

Application Information

| Recommended Dilution: | Western Blot (1:1000-1:2000) | | | | |
|------------------------------|--|--|--|--|--|
| | Note: Optimal dilutions/concentrations should be determined by the | | | | |
| | end user. | | | | |
| Expected/apparent MW: | 59 / 51 kDa | | | | |



Confirmed Reactivity: Predicted Reactivity:

Arabidopsis thaliana

Among 25 analyzed species, the sequence of the synthetic peptide used for immunization is 80-99% homologues with the sequence in *Brassica napus, Brassica rapa subsp. Chinensis, Zea mays, Oryza sativa Japonica Group, Triticum aestivum.* For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example

| 55 4 3 4 34 26 | kDa 72 | 1 | 2 | 3 |
|---------------------------------|-----------|---|---|---|
| 26 | 43 🕳 | - | - | - |
| | | | | |

Lane 1: 10 μg total protein from *Arabidopsis thaliana* leaf. Lane 2: 25 μg total protein from *Arabidopsis thaliana* leaf. Lane 3: 50 μg total protein from *Arabidopsis thaliana* leaf. **Electrophoresis:** 15% SDS-Urea-PAGE **Transfer:** blotting to NC (nitrocellulose) membrane for 1 h. **Blocking:** 5% skim milk at RT or 4°C for 1 h. **Primary antibody:** 1:2000 dilution overnight at 4°C. **Secondary antibody:** 1:20000 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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