

Anti-Rubisco small subunit (RbcS) antibody

Catalog: PHY0067A

Product Information

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| Description: | Rabbit polyclonal antibody |
| Background: | In photosynthetic organisms, D-ribulose-1, 5-bisphosphate carboxylase/oxygenase (Rubisco) is the major enzyme assimilating atmospheric CO ₂ into the biosphere. This enzyme contains two subunits, each present in eight copies. In plants and green algae, 55-kD large subunit (RbcL) is coded by the chloroplast <i>rbcL</i> gene, and the 15-kD small subunit (RbcS) is coded by a family of nuclear <i>rbcS</i> genes (AT1G67090, AT5G38430, AT5G38420, AT5G38410). |
| Synonyms: | RbcS, SSU |
| Immunogen: | KLH-conjugated synthetic peptide (15 aa from central section) derived from <i>Arabidopsis thaliana</i> RbcS (AT1G67090). |
| 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 & Storage: | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 6 months, -20 to -70°C under sterile conditions after reconstitution. 1 month, 2 to 8°C under sterile conditions after reconstitution. |
| Shipping: | The product is shipped at 4°C. Upon receipt, store it immediately at the temperature recommended above. |

Application Information

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| Recommended Dilution: | Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user. |
| Expected / apparent MW: | 20 kDa |

Research Use Only

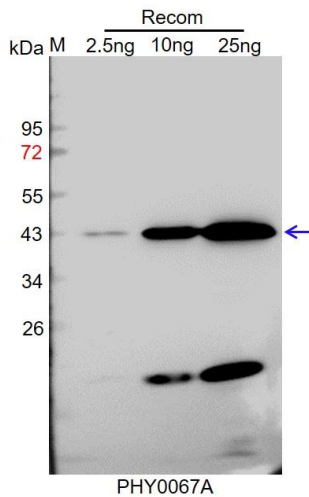
Predicted Reactivity:

Among species analyzed, the sequence of the synthetic peptide used for immunization is 80-99% homologues with the sequence in *Brassica napus*, *Brassica rapa*, *Populus trichocarpa*.

The sequence of the synthetic peptide used for immunization is 93% homologues with the sequence in RBCS1B (AT5G38430) and 87% homologues with the sequence in RBCS2B (AT5G38420), RBCS3B (AT5G38410).

For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 43 kDa.

Electrophoresis: 12% SDS-PAGE

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

Blocking: 5% skim milk at RT or 4°C for 1 h.

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

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.