

## Anti-RbcL subunit of RuBisCO antibody

Catalog: PHY0066A

## **Product Information**

**Description:** Rabbit polyclonal antibody

**Background:** Ribulose-1,5-bisphosphate carboxylase/oxygenase commonly known by the

abbreviation RuBisCO, is an enzyme involved in the first major step of carbon fixation, a process by which atmospheric carbon dioxide is converted by plants to energy-rich molecules such as glucose. In chemical terms, it catalyzes the

carboxylation of ribulose-1,5-bisphosphate (also known as RuBP). It is

probably the most abundant enzyme on Earth.

The enzyme usually consists of two types of protein subunit, called the large

chain (RbcL) and the small chain (RbcS).

**Synonyms:** RbcL, Ribulose-1,5-bisphosphate carboxylase, oxygenase

**Immunogen:** KLH-conjugated synthetic peptide (16 aa from N terminal section) derived from

Arabidopsis thaliana RbcL (ATCG00490).

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°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**

**Recommended Dilution:** Western Blot (1:1000-1:5000)

Note: Optimal dilutions/concentrations should be determined by the

end user.

Expected / apparent MW: 53 kDa

Research Use Only



Confirmed Reactivity: Arabidopsis thaliana

**Predicted Reactivity:** Among species analyzed, the sequence of the synthetic peptide

used for immunization is 100% homologues with the sequence in

Zea mays, Brassica rapa, Leymus chinensis, Setaria viridis, Cucumis sativus, Gossypium raimondii, Medicago truncatula,

Brassica napus, Nicotiana tabacum, Solanum lycopersicum,

Panicum virgatum, Triticum aestivum, Solanum tuberosum, Oryza

sativa, Sorghum bicolor, Spinacia oleracea, Chlamydomonas reinhardtii, Populus trichocarpa, Glycine max, Physcomitrium

patens, Vitis vinifera, Hordeum vulgare.

For more species homologues information, please contact tech

support at tech@phytoab.com.

## **Application Example**

Str: 3.5 µg stromal protein from Arabidopsis thaliana.

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: 1:5000 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.