

Anti-RuBisCO large subunit antibody

Catalog: PHY1927

Product Information

Description:	Mouse monoclonal 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:	Recombinant protein of RbcL derived from Arabidopsis thaliana ATCG00490.				
Form:	Lyophilized				
Quantity:	150 µg				
Purification:	Protein A purified				
Reconstitution:	Reconstitution with 150µl of 0.01M 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 $^\circ\!\!\!\!^\circ$ under sterile conditions after reconstitution.				
	1 month, 2 to 8 $^\circ\!\mathrm{C}$ 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 (1:1000-1:4000)			
	Note: Optimal dilutions/concentrations should be determined by the			
	end user.			
Expected/apparent MW:	53 kDa			



Confirmed Reactivity:

Predicted Reactivity:

Arabidopsis thaliana, Oryza sativa, Zea mays For more species homologues information, please contact tech support at <u>tech@phytoab.com</u>.

Application Example

Example 1

kDa	1	2	3	
72 55 43	-	-	-	←
34 👄				
26				
17				

Lane 1: 1.5 µg stromal protein from *Arabidopsis thaliana* leaf. Lane 2: 3 µg stromal protein from *Arabidopsis thaliana* leaf. Lane 3: 6 µg stromal 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:** 1:4000 dilution overnight at 4°C.

PHY1927

Secondary antibody: 1:5000 dilution using Goat Anti-Mouse IgG H&L(HRP) (Cat# PHY6006) **Detection:** using chemiluminescence substrate and image were captured with CCD camera.

Example 2

KDd					
130 95	20 μg total protein from <i>Oryza sativa</i> leaf.				
72 	Electrophoresis: 15% SDS-PAGE				
43	Transfer: blotting to NC (nitrocellulose) membrane for 1 h.				
26	Blocking: 5% skim milk at RT or 4° C for 1 h.				
	Primary antibody: 1:1000 dilution overnight at 4 °C.				
17	Secondary antibody: 1:5000 dilution using Goat Anti-Mouse IgG H&L(HRP)				
PHY1927	(Cat# PHY6006).				

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

Research Use Only



Final Primary antibody: 1:5000 dilution using Goat Anti-Mouse IgG H&L(HRP)

(Cat# PHY6006).

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



Research Use Only

PhytoAB Inc.