Anti-PLCG1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R015330

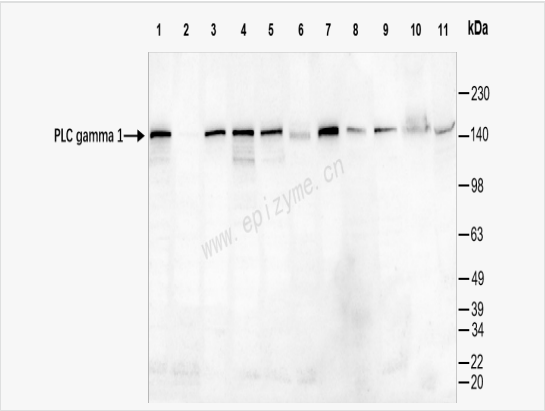
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	70H11T65
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human PLC gamma 1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PLCG1 Rabbit mAb [70H11T65] is for research use only and not for use in diagnostic or therapeutic procedures.

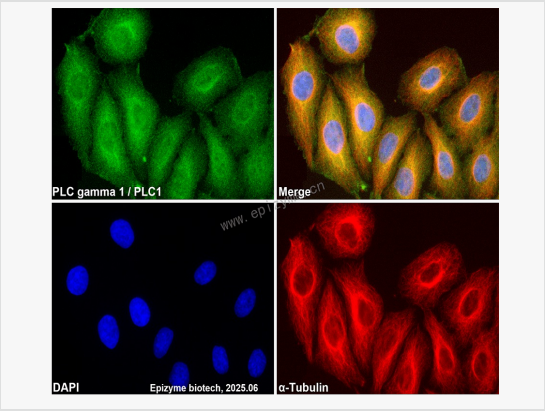
Protein Information

Synonyms	1 phosphatidyl D myo inositol 4 5 bisphosphate; 1 phosphatidylinositol 4 5 bisphosphate phosphodiesterase gamma 1; 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-1; Inositoltrisphosphohydrolase; Monophosphatidylinositol phosphodiesterase; NCKAP3; Phosphatidylinositol phospholipase C; Phosphoinositidase C; Phosphoinositide phospholipase C; Phosphoinositide phospholipase C-gamma-1; Phospholipase C 148; Phospholipase C gamma 1; Phospholipase C-gamma-1; Phospholipase C-II; PLC gamma 1; PLC II; PLC-148; PLC-gamma-1; PLC-II; PLC1; PLC148; Plcg1; PLCG1_HUMAN; PLCgamma1.
Calculated MW	Calculated MW: 149 kDa; Observed MW: 149 kDa
Uniprot ID	P19174
Gene ID	5335
Background	The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Cellular Location	Cell projection > lamellipodium. Cell projection > ruffle. Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment.

Validation Images



Western Blot - Anti-PLCG1 Rabbit mAb [70H11T65]
All lanes: R015330 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lane 5: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates
Lane 6: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 7: Mouse brain whole tissue lysates
Lane 8: Mouse liver whole tissue lysates
Lane 9: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates
Lane 10: Rat brain whole tissue lysates
Lane 11: Rat liver whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 149 kDa
Observed band size: 149 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-PLCG1 Rabbit mAb [70H11T65]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R015330 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).