

Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody

Catalog # ABO13659

Product Information

Application	WB, IF, ICC, IP
Primary Accession	P19174
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	5335
Other Names	1-phosphatidylinositol 4, 5-bisphosphate phosphodiesterase gamma-1, 3.1.4.11, PLC-148, Phosphoinositide phospholipase C-gamma-1, Phospholipase C-II, PLC-II, Phospholipase C-gamma-1, PLC-gamma-1, PLCG1 (HGNC:9065), PLC1
Calculated MW	148532
Application Details	WB 1:1000-1:5000 ICC/IF 1:50-1:200 IP 1:50
Subcellular Localization	Cell projection, lamellipodium. Cell projection, ruffle. Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: FAA-16
Immunogen	A synthesized peptide derived from human PLCG1
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	PLCG1 (HGNC:9065)
Synonyms	PLC1
Function	Mediates the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3). Plays an important role in the regulation of intracellular signaling cascades. Becomes activated in response to ligand-mediated activation of receptor-type tyrosine kinases, such as PDGFRA, PDGFRB, EGFR, FGFR1, FGFR2, FGFR3 and FGFR4 (By similarity). Plays a role in actin reorganization and cell migration (PubMed: 17229814). Guanine nucleotide exchange factor that binds the GTPase DNM1 and catalyzes the dissociation of GDP, allowing a GTP molecule to bind in its place, therefore enhancing DNM1-dependent endocytosis (By similarity).
Cellular Location	Cell projection, lamellipodium. Cell projection, ruffle. Note=Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment.

Images

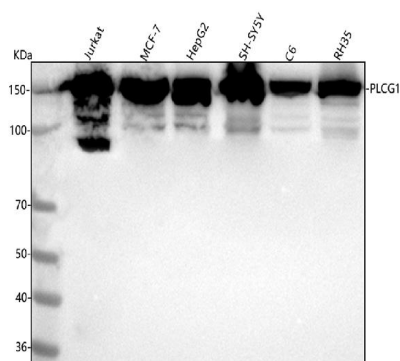
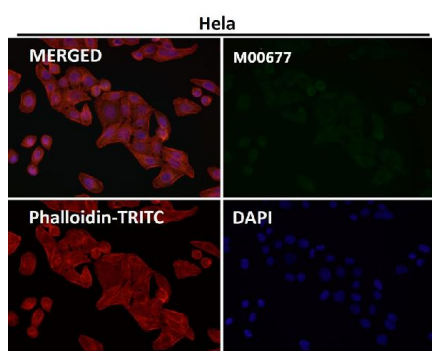


Figure 1. Western blot analysis of PLCG1 using anti-PLCG1 antibody (M00677).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,
Lane 2: human MCF-7 whole cell lysates,
Lane 3: human HepG2 whole cell lysates,
Lane 4: human SH-SY5Y whole cell lysates,
Lane 5: rat C6 whole cell lysates,
Lane 6: rat RH35 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PLCG1 antigen affinity purified monoclonal antibody (Catalog # M00677) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PLCG1 at approximately 149 kDa. The expected band size for PLCG1 is at 149 kDa.



Immunofluorescent analysis using the Antibody at 1:50 dilution.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.