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Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody

Catalog # ABO13659

Specification

Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody - 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.

Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody - 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 MW KDa

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.

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.

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.

Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody - 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.

Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PLCG1/Plc Gamma 1 Rabbit Monoclonal Antibody - Images

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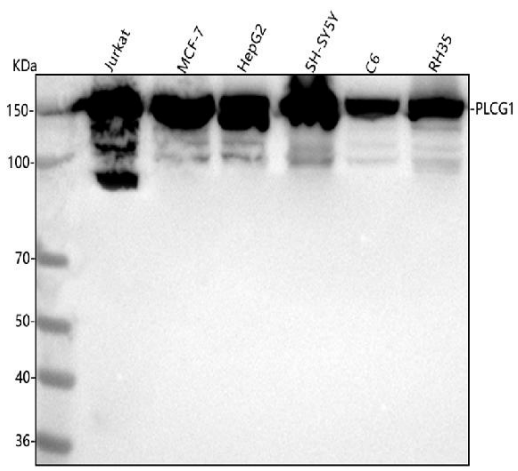
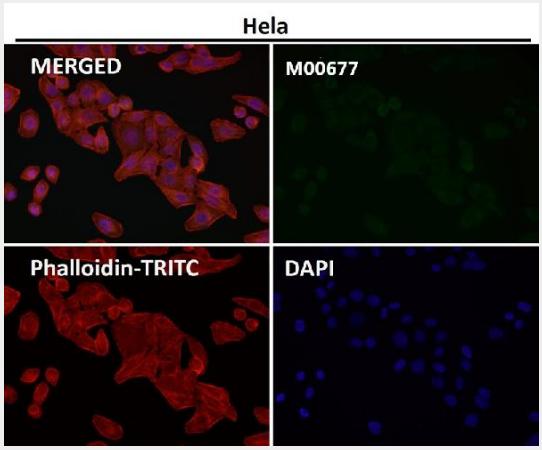


Figure 1. Western blot analysis of PLCG1 using anti-PLCG1 antibody (M00677).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Jurkat whole 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.