

### PLCG1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PLCG1. Catalog # AT3335a

### **Specification**

### PLCG1 Antibody (monoclonal) (M01) - Product Information

Application IF, WB, E **Primary Accession** P19174 Other Accession NM 002660 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 kappa Calculated MW 148532

PLCG1 Antibody (monoclonal) (M01) - Additional Information

#### **Gene ID 5335**

#### **Other Names**

1-phosphatidylinositol 4, 5-bisphosphate phosphodiesterase gamma-1, PLC-148, Phosphoinositide phospholipase C-gamma-1, Phospholipase C-II, PLC-II, Phospholipase C-gamma-1, PLC-gamma-1, PLCG1, PLC1

#### **Target/Specificity**

PLCG1 (NP\_002651, 1192 a.a. ~ 1291 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

#### **Dilution**

WB~~1:500~1000

#### **Format**

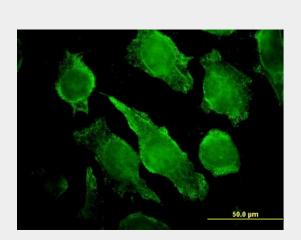
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

#### Storage

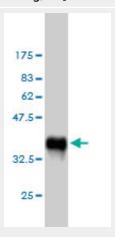
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

#### **Precautions**

PLCG1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.



Immunofluorescence of monoclonal antibody to PLCG1 on HeLa cell. [antibody concentration 40 ug/ml]



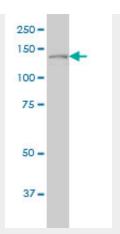
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa).



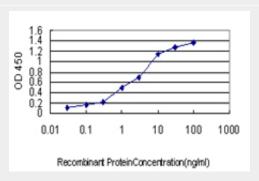
## PLCG1 Antibody (monoclonal) (M01) - Protocols

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

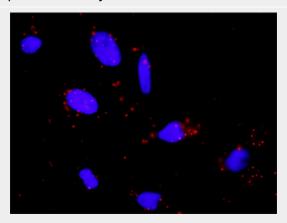
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture



PLCG1 monoclonal antibody (M01), clone 2A2 Western Blot analysis of PLCG1 expression in Hela S3 NE ( (Cat # AT3335a )

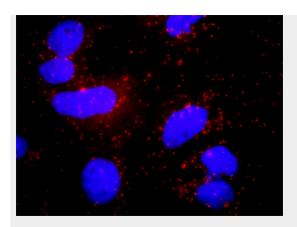


Detection limit for recombinant GST tagged PLCG1 is approximately 0.1ng/ml as a capture antibody.

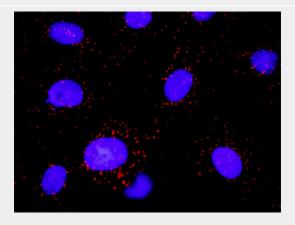


Proximity Ligation Analysis of protein-protein interactions between PTK2 and PLCG1 HeLa cells were stained with anti-PTK2 rabbit purified polyclonal 1:1200 and anti-PLCG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).





Proximity Ligation Analysis of protein-protein interactions between HCK and PLCG1. Huh7 cells were stained with anti-HCK rabbit purified polyclonal 1:1200 and anti-PLCG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Proximity Ligation Analysis of protein-protein interactions between PDGFRB and PLCG1. Mahlavu cells were stained with anti-PDGFRB rabbit purified polyclonal 1:600 and anti-PLCG1 mouse monoclonal antibody 1:100. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

# PLCG1 Antibody (monoclonal) (M01) - 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.

# PLCG1 Antibody (monoclonal) (M01) - References

1.An analysis of protein-protein interactions in cross-talk pathways reveals CRKL as a novel prognostic marker in hepatocellular carcinoma.Liu CH, Chen TC, Chau GY, Jan YH, Chen CH, Hsu CN, Lin KT, Juang YL, Lu PJ, Cheng HC, Chen MH, Chang CF, Ting YS, Kao CY, Hsiao M, Huang CY.Mol Cell Proteomics. 2013 Feb 8. [Epub ahead of print]