

# PLCG1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PLCG1.

Catalog # AT3335a

## Product Information

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<b>Application</b>	WB, IF, E
<b>Primary Accession</b>	<a href="#">P19174</a>
<b>Other Accession</b>	<a href="#">NM_002660</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1 kappa
<b>Clone Names</b>	2A2
<b>Calculated MW</b>	148532

## Additional Information

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<b>Gene ID</b>	5335
<b>Other Names</b>	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
<b>Target/Specificity</b>	PLCG1 (NP_002651, 1192 a.a. ~ 1291 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IF~~1:50~200 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	PLCG1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

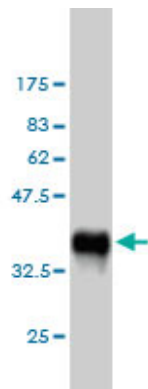
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The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction 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.

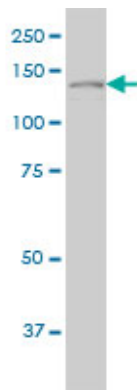
## References

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]

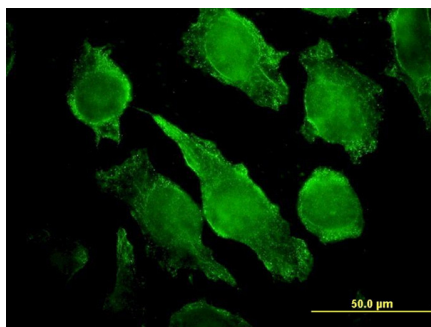
## Images



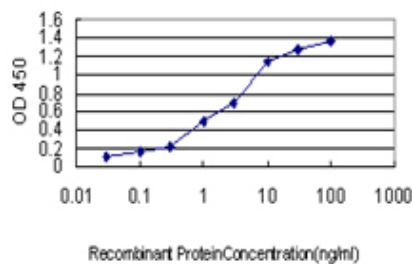
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



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

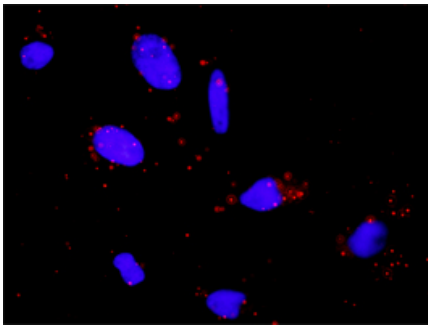


Immunofluorescence of monoclonal antibody to PLCG1 on HeLa cell. [antibody concentration 40 ug/ml]

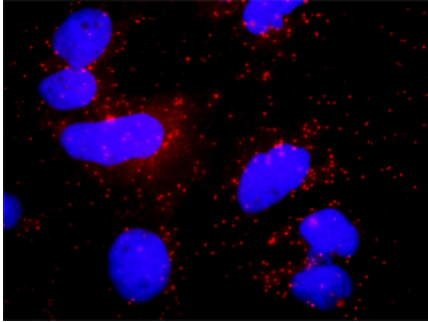


Detection limit for recombinant GST tagged PLCG1 is approximately 0.1ng/ml as a capture antibody.

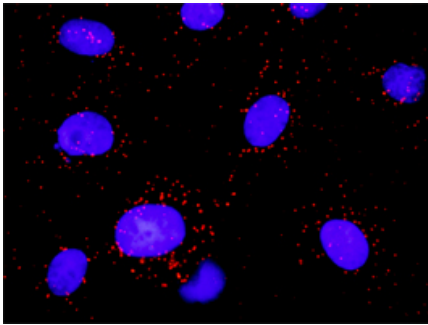
Proximity Ligation Analysis of protein-protein interactions between PTK2 and PLCG1 HeLa cells were stained with anti-PTK2 rabbit purified polyclonal 1:1200 and



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).

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