

**Product Name: PLCG1 Mouse Monoclonal Antibody****Catalog #: AMM81542**

For research use only.

**Summary**

|                      |   |
|----------------------|---|
| <b>Description</b>   | Mouse monoclonal Antibody   |
| <b>Host</b>          | Mouse   |
| <b>Application</b>   | WB,IHC,ICC,ELISA,FC   |
| <b>Reactivity</b>    | Human,Rat,Monkey  |
| <b>Conjugation</b>   | Unconjugated  |
| <b>Modification</b>  | Unmodified  |
| <b>Isotype</b>       | Mouse IgG1  |
| <b>Clonality</b>     | Monoclonal  |
| <b>Form</b>          | Liquid  |
| <b>Concentration</b> | 1mg/ml  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>      | Ice bags  |
| <b>Buffer</b>        | Purified antibody in PBS with 0.05% sodium azide                            |
| <b>Purification</b>  | Affinity Purification   |

**Application**

|                         |   |
|-------------------------|---|
| <b>Dilution Ratio</b>   | WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400 |
| <b>Molecular Weight</b> | 148.5kDa  |

**Antigen Information**

|                          |  |
|--------------------------|--|
| <b>Gene Name</b>         | PLCG1  |
| <b>Alternative Names</b> | PLC1; NCKAP3; PLC-II; PLC148; PLCgamma1  |
| <b>Gene ID</b>           | 5335.0   |
| <b>SwissProt ID</b>      | P19174   |
| <b>Immunogen</b>         | Purified recombinant fragment of human PLCG1 (AA: 1192-1291) expressed in E. Coli. |

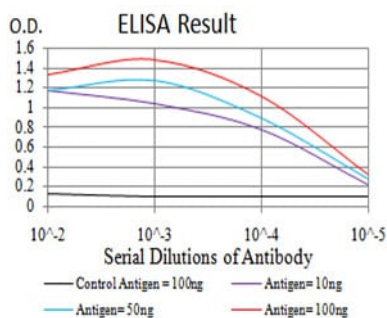
**Background**

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

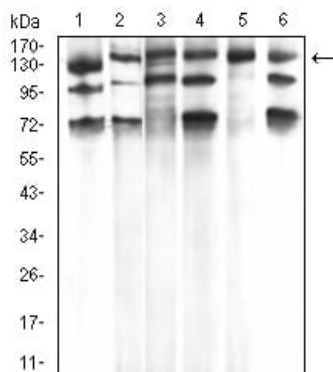
the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene.

## Research Area

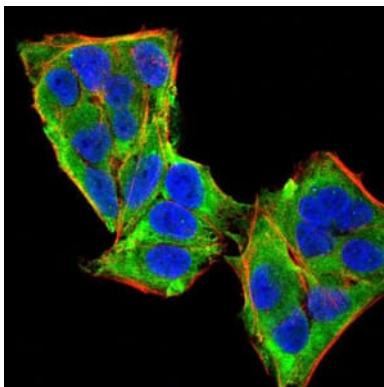
## Image Data



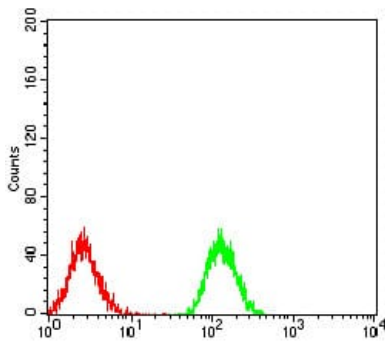
Black line: Control Antigen (100 ng); Purple line: Antigen(10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng);



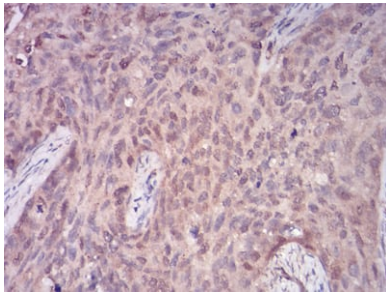
Western blot analysis using PLCG1 mouse mAb against HeLa (1), A431 (2), C6 (3), NIH/3T3 (4), COS7 (5), and HCT116 (6) cell lysate.



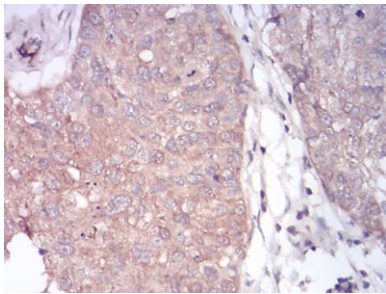
Immunofluorescence analysis of HeLa cells using PLCG1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Jurkat cells using PLCG1 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues using PLCG1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human bladder cancer tissues using PLCG1 mouse mAb with DAB staining.