

# Anti-PLC gamma 1 Antibody

Catalog # AP96004

## Product Information

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|-------------------|------------------------|
| Application       | WB, IHC, FC, IF/IC     |
| Primary Accession | <a href="#">P19174</a> |
| Reactivity        | Human, Rat, Mk         |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |
| Calculated MW     | 148532                 |

## Additional Information

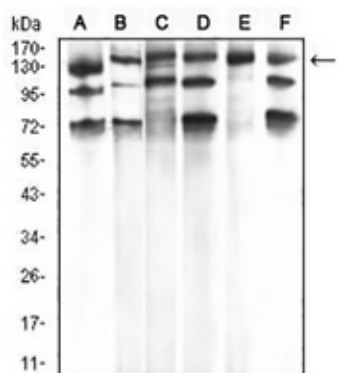
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|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 5335                                                                                                                                                                                          |
| Other Names        | PLC1; 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 |
| Target/Specificity | Recombinant fusion protein of human PLC gamma 1 expressed in E. Coli                                                                                                                          |
| Dilution           | WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200) IF/IC~~N/A                                                                                                                      |
| Format             | Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.                                                                                                                      |
| Storage            | Store at -20 °C.Stable for 12 months from date of receipt                                                                                                                                     |

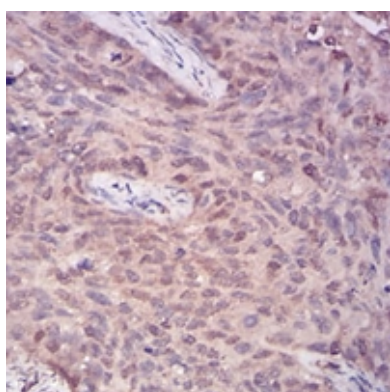
## Protein Information

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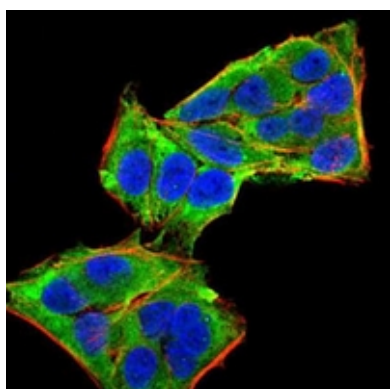
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | PLCG1 ( <a href="#">HGNC:9065</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 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: <a href="#">17229814</a> ). 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



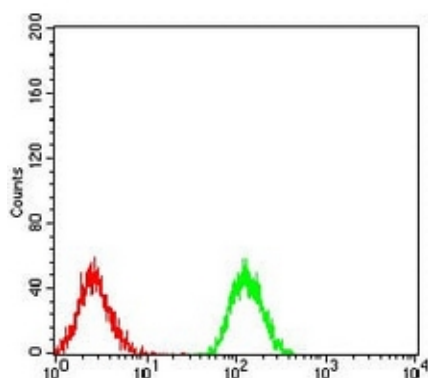
Western blot analysis of PLC gamma 1 expression in Hela (A), A431 (B), C6 (C), NIH/3T3 (D), COS7 (E), HCT116 (F) whole cell lysates. (Predicted band size: 149 kD; Observed band size: 150 kD)



Immunohistochemical analysis of PLC gamma 1 staining in human cervical cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PLC gamma 1 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of Jurkat cells using Anti-PLC gamma 1 Antibody (green) and negative control (red).

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