

# PLCG1 (Ab-771) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50025

#### **Product Information**

Application WB, IHC Primary Accession P19174

**Reactivity** Human, Mouse, Rat

HostRabbitClonalitypolyclonalCalculated MW148532

### **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

**Dilution** WB~~ 1:1000 IHC~~1:50-1:100

Format Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4,

150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°C

#### **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.

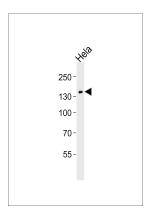
# **Background**

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, FGFR1, FGFR2, FGFR3 and FGFR4. Plays a role in actin reorganization and cell migration.

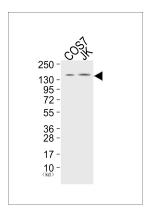
#### References

Burgess W.H.,et al.Mol. Cell. Biol. 10:4770-4777(1990). Deloukas P.,et al.Nature 414:865-871(2001). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Mohammadi M.,et al.Mol. Cell. Biol. 11:5068-5078(1991). Park D.J.,et al.J. Biol. Chem. 267:1496-1501(1992).

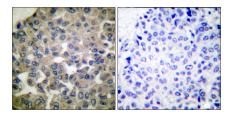
## **Images**



Western blot analysis of lysates from Hela cell line ,using PLCG1 (Ab-771) Antibody(B0079). B0079 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug.



Western blot analysis of extracts from COS7 cells (Lane 1), and JK cells (Lane 2), using PLCG1 (Ab-771) Antibody. The lane on the left is treated with synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using PLCG1 (Ab-771) antibody.

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