Recombinant PLCG1 Monoclonal Antibody

catalog number: **AN301997L**

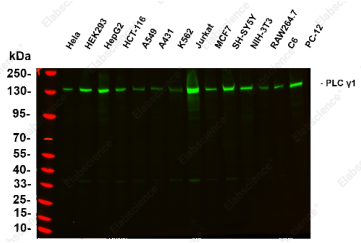
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Human;Mouse;Rat
Immunogen	The specific immunogen used to produce this antibody is proprietary information.
Host	Rabbit
Isotype	Rabbit IgG
Clone	C111618
Purification	Protein A purified
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

Applications	Recommended Dilution
WB	1:2000-1:10000
IHC	1:200-1:1000
IF	1:200-1:1000
IP	1:50-1:200
ELISA	1:5000-1:20000

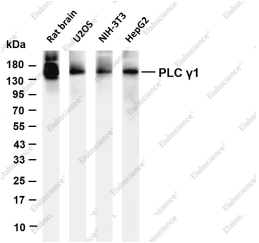
Data



Western blot analysis of Hela, HEK293, HepG2, HCT-116, A549, A431, K562, Jurkat, MCF7, SH-SY5Y, NIH-3T3, RAW264.7, C6 and PC-12 cell lysates using PLCG1 Antibody (AN301997L) at a dilution of 1:5000.

Observed-MW:149 kDa

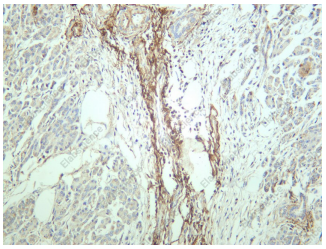
Calculated-MW:149 kDa



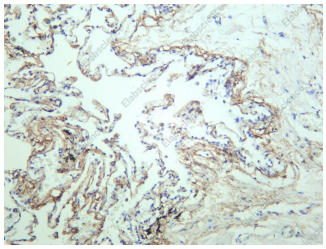
Western blot analysis of Rat brain, U2OS, NIH-3T3 and HepG2 cell lysates using PLCG1 Antibody (AN301997L).

Observed-MW:149 kDa

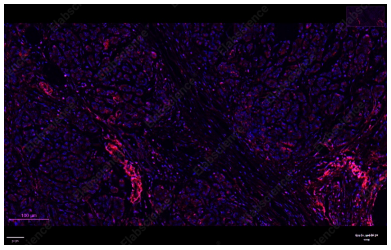
Calculated-MW:149 kDa



Immunohistochemical analysis of paraffin-embedded Human pancreas sections using PLCG1 Antibody (AN301997L).



Immunohistochemical analysis of paraffin-embedded Human lung carcinoma sections using PLCG1 Antibody (AN301997L).



Fluorescence immunohistochemical analysis of Human pancreas using PLCG1 Antibody(AN301997L)

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	Ice bag

Background

Phosphoinositide-specific phospholipase C (PLC) plays a significant role in transmembrane signaling.In response to extracellular stimuli, such as hormones, growth factors, and neurotransmitters, PLC hydrolyzes phosphatidylinositol 4,5-bisphosphate (PIP2) to generate two secondary messengers: inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG). At least four families of PLCs have been identified: PLCβ, PLCγ, PLCδ, and PLCε. Phosphorylation is one of the key mechanisms that regulate the activity of PLC. PLCγ is activated by both receptor and non-receptor tyrosine kinases. PLCγ forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLCγ at Tyr771, 783, and 1248. Phosphorylation by Syk at Tyr783 activates the enzymatic activity of PLCγ1. PLCγ2 is engaged in antigen dependent signaling in B cells and collagen-dependent signaling in platelets. Phosphorylation by Btk or Lck at Tyr753, 759, 1197, and 1217 is correlated with PLCγ2 activity.