

Recombinant PLCG1 Monoclonal Antibody

catalog number: **AN301997L**

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

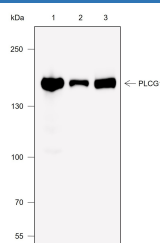
Description

Reactivity	Human;Rat;Mouse
Immunogen	Peptide. This information is proprietary to PTMab.
Host	Rabbit
Isotype	IgG, κ
Clone	A717
Purification	Protein A purified
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

Applications Recommended Dilution

WB	1:1000
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Data



Western Blot with PLCG1 Monoclonal Antibody at dilution of 1:1000. Lane 1: HeLa, Lane 2: PC-12, Lane 3: Mouse brain

Observed-MW:150 kDa

Calculated-MW:149 kDa

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: PLC β , PLC γ , PLC δ , and PLC ϵ . Phosphorylation is one of the key mechanisms that regulate the activity of PLC. PLC γ is activated by both receptor and non-receptor tyrosine kinases. PLC γ forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLC γ at Tyr771, 783, and 1248. Phosphorylation by Syk at Tyr783 activates the enzymatic activity of PLC γ 1. PLC γ 2 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 PLC γ 2 activity.

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