

Anti-PLC γ 1 (N-terminal region)

Cat. # **PM1561**
Host **Mouse Monoclonal IgG1**
Size **100 μ l**

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 regulates the activity of PLC. PLC δ is activated by both receptor and nonreceptor tyrosine kinases. PLC γ 1 forms a complex with EGF and PDGF receptors, which leads to phosphorylation at tyrosine 771, 783, and 1245. In addition, antigen receptor-induced activation of PLC γ 1 leads to phosphorylation at both Tyr-775 and Tyr-783. These two sites are equally important for activation of enzymatic activity.

References:

Obermeier, A. et al. (1996) EMBO J. 15:73.
Chen, P. et al. (1996) J Cell. Biol. 134:689.
Serrano, C.J. et al. (2005) J. Immunol. 174:6233.

Immunogen:

Clone (M156) was generated from a synthetic peptide corresponding to amino acids in the N-terminal region of human PLC γ 1. This sequence is highly conserved in rat and mouse PLC γ 1, and has low homology to PLC γ 2.

Buffer and Storage:

Mouse monoclonal antibody purified with protein A chromatography is supplied in 100 μ l phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

Applications:

Western blotting	1:1000 dilution [†]	Immunocytochemistry	1:100
ELISA	1:2000 dilution	Immunoprecipitation	5-10 μ l

End user should determine optimal dilution for their particular applications and experiments.

[†]Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

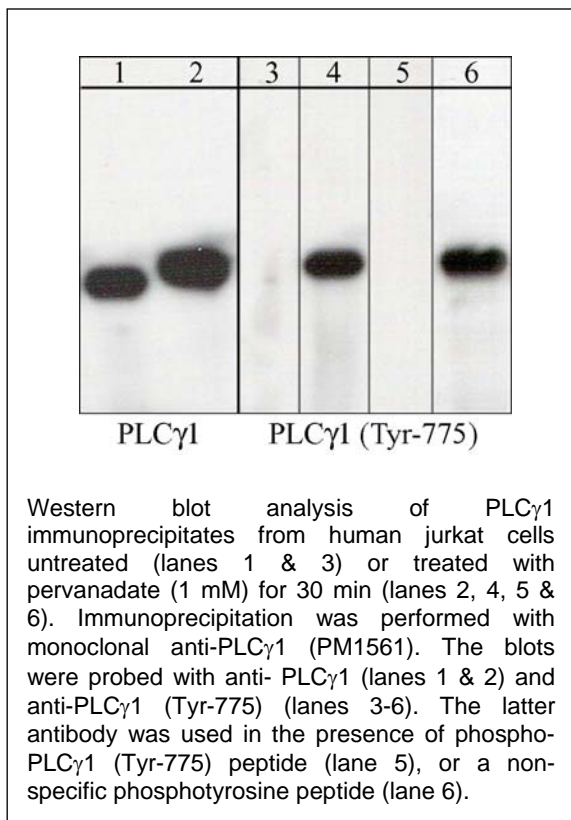
Specificity:

The antibody detects a 150 kDa* protein in human A431, Hct116, and Jurkat cells, as well as in mouse brain.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

Related Products:

PP1491 PLC γ 1 (Tyr-775), phospho-specific Rabbit Polyclonal



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www.ecmbiosciences.com
telephone: 859-879-2075
toll-free: 1-800-859-8202
tech: info@ecmbiosciences.com

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