10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PLCγ1 (N-terminal region) Antibody

Catalog # AN1909

Product Information

Application	WB, ICC, IP
Primary Accession	P19174
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M156
Calculated MW	148532

Additional Information

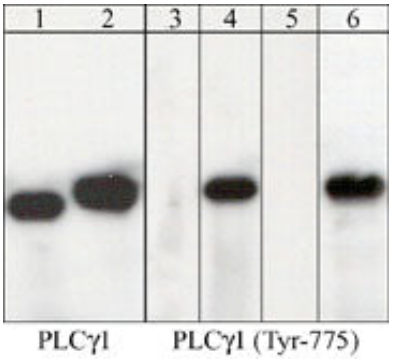
Gene ID	5335
Other Names	Phospholipase C gamma1, phosphodiesterase
Dilution	WB~~1:1000 ICC~~N/A IP~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-PLCγ1 (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

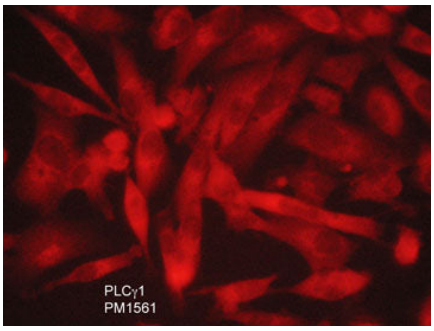
Phosphoinositide-specific phospholipase C (PLC) plays a significant role in transmembrane signaling. In response to extracellular stimuli such as hormones, growth factors, and neurotransmitters, PLC hydrolyzes phosphatidylinositol 4,5-bisphosphate (PIP2) to generate two secondary messengers: inositol 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 regulates the activity of PLC. PLCδ is activated by both receptor and nonreceptor tyrosine kinases. PLCγ1 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 PLCγ1 leads to phosphorylation at both Tyr-775 and Tyr-783. These two sites are equally important for activation of enzymatic activity.

Images

Western blot analysis of PLCγ1 immunoprecipitates from human jurkat cells untreated (lanes 1 & 3) or treated with pervanadate (1 mM) for 30 min (lanes 2,4,5,6). Immunoprecipitation was performed with anti-PLCγ1 (AN1909). The blots were probed with anti-PLCγ1 (lanes 1



& 2) and anti-PLCγ1 (Tyr-775) (lanes 3-6). The latter antibody was used in the presence of phospho- PLCγ1 (Tyr-775) peptide (lane 5), or unrelated phosphotyrosine peptide (lane 6).



Immunocytochemical labeling of PLCγ1 in adelhyde-fixed and NP-40 permeabilized human MDA-MB-231 breast carcinoma cells. The cells were labeled with mouse monoclonal anti-PLCγ1 (AN1909) antibody. The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

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