

Human Phospho-PLC-γ2 (Y753) Antibody

Monoclonal Mouse IgG_{2B} Clone # 790623 Catalog Number: MAB37161

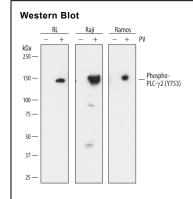
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human PLC-γ2 when phosphorylated at Y753.	
Source	Monoclonal Mouse IgG _{2B} Clone # 790623	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Phosphopeptide containing the human PLC-γ2 Y753 site Accession # P16885	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 μg/mL	See Below

DATA



Detection of Human Phospho-PLC-γ2 (Y753) by Western Blot. Western blot shows lysates of RL human non-Hodgkin's lymphoma B cell line, Raji human Burkitt's lymphoma cell line, and Ramos human Burkitt's lymphoma cell line untreated (-) or treated (+) with 1 mM Pervanadate (PV) for 10 minutes. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human Phospho-PLC-y2 (Y753) Monoclonal Antibody (Catalog # MAB37161) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Phospho-PLC-γ2 (Y753) at approximately 150 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution Sterile PBS to a final concentration of 0.5 mg/mL

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The Phospholipase C family consists of 13 isozymes within six subfamilies, PLC- δ , - β , - γ , - ϵ , - ζ , and - η . PLC- γ 2 (Phospholipase C gamma-2) contains 2 SH2 and 1 SH3 domains and is primarily limited to cells of hematopoietic lineage. PLC- γ 2 is activated by receptor tyrosine kinases in response to growth factors, neurotransmitters, and hormones, and downstream through Lck kinase-dependent phosphorylation at Y753 and Y759. Activated PLC- γ 2 catalyzes the hydrolysis of phosphatidylinositol 4, 5-biphosphate to produce the second messengers inositol 1, 4, 5-triphosphate (IP3) and diacylglycerol (DAG). IP3 mobilizes the release of calcium while DAG activates protein kinase C. PLC- γ 2 is involved in collagen induced signaling in platelets and antigen-dependent signaling in B-lymphocytes. Human PLC- γ 2 shares 94% and 95% sequence identity overall with mouse and rat PLC- γ 2, respectively, and 100% sequence identity within the peptide immunogen.

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