

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
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The Phospholipase C family consists of 13 isozymes within six subfamilies, PLC-δ, -β, -γ, -ε, -ζ, and -η. PLC-γ2 (Phospholipase C gamma-2) contains 2 SH2 and 1 SH3 domains and is primarily limited to cells of hematopoietic lineage. PLC-γ2 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-γ2 catalyzes the hydrolysis of phosphatidylinositol 4, 5-bisphosphate 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-γ2 is involved in collagen induced signaling in platelets and antigen-dependent signaling in B-lymphocytes. Human PLC-γ2 shares 94% and 95% sequence identity overall with mouse and rat PLC-γ2, respectively, and 100% sequence identity within the peptide immunogen.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.