

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PLC-β3 in Western blots. Does not detect recombinant human (rh) PLC-β1, rhPLC-β2, or rhPLC-β4 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PLC-β3 Lys27-Leu246 Accession # Q01970
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 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	1 μg/mL	See Below

DATA

Western Blot

Detection of Human PLC-β3 by Western Blot. Western blot shows lysates of DU145 human prostate carcinoma cell line, HEK293 human embryonic kidney cell line, and HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 1 μg/mL Sheep Anti-Human PLC-β3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4716) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band for PLC-β3 was detected at approximately 150 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Western Blot

Detection of Human PLC-β3 by Western Blot. Western blot shows recombinant human PLC-β1, PLC-β2, PLC-β3, PLC-β4 (5 ng/lane). PVDF membrane was probed with 1 μg/mL Sheep Anti-Human PLC-β3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4716) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band for PLC-β3 was detected at approximately 29 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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. <ul style="list-style-type: none"> • 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-β3 (Phospholipase C beta-3) is a G-protein dependent phosphodiesterase that catalyzes the generation of inositol 1,4,5-trisphosphate (IP3) and diacylglycerol (DAG) from phosphatidylinositol 4,5-bisphosphate (IP2), an essential step in the intracellular transduction of many extracellular signals. The PLC-β subfamily consists of 4 isozymes, β1-4, which differ in their tissue distribution and their ability to be activated by G proteins. PLC-β1 and PLC-β3 are more widely expressed, whereas PLC-β2 is restricted to hematopoietic cells and PLC-β4 is limited to certain neuronal cells and the retina.