SANTA CRUZ BIOTECHNOLOGY, INC.

PhLP (N-16): sc-23255

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Phosducin-like protein (PhLP, PDCL) is an ethanol-responsive modulator of heterotrimeric G proteins. The protein shares extensive amino acid sequence homology with phosducin (Phd), a phosphoprotein expressed in retina and pineal gland. Both PhLP and Phd regulate G protein signaling by binding to the βγ subunits of G proteins. PhLP interacts with $G_{\beta\gamma}$ via a short C-terminal binding site. Additionally, PhLP acts as a substrate for GRK2 phosphorylation at the same C-terminal binding site between residues 195 and 218. PhLPs may participate directly in the regulation of calcium-evoked exocytosis in adrenal medullary chromaffin cells. Glycosylated PhLP regulates opioid receptor function in mouse brain.

CHROMOSOMAL LOCATION

Genetic locus: PDCL (human) mapping to 9q33.2; Pdcl (mouse) mapping to 2 B.

SOURCE

PhLP (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PhLP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23255 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

PhLP (N-16) is recommended for detection of PhLP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PhLP (N-16) is also recommended for detection of PhLP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PhLP siRNA (h): sc-45420, PhLP siRNA (m): sc-45421, PhLP shRNA Plasmid (h): sc-45420-SH, PhLP shRNA Plasmid (m): sc-45421-SH, PhLP shRNA (h) Lentiviral Particles: sc-45420-V and PhLP shRNA (m) Lentiviral Particles: sc-45421-V.

Molecular Weight of PhLP short isoform: 29 kDa.

Molecular Weight of PhLP long isoform: 37 kDa.

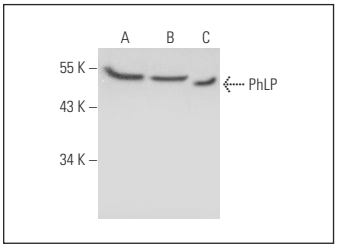
Molecular Weight of PhLP glycosylated long isoform: 45-50/100/150 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HL-60 whole cell lysate: sc-2209 or K-562 whole cell lysate: sc-2203.

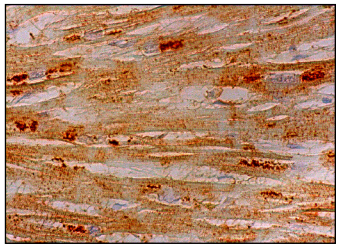
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



PhLP (N-16): sc-23255. Western blot analysis of PhLP expression in HL-60 (**A**), Jurkat (**B**) and K-562 (**C**) whole cell lysates.



PhLP (N-16): sc-23255. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.