

PLSCR3 (N-15): sc-68122

BACKGROUND

The calcium-dependent mitochondrial membrane protein PLSCR3 (phospholipid scramblase 3), also known as PLS3, is a member of the phospholipid scramblase (PLS) family. The PLS family consists of membrane-bound enzymes that participate in the bi-directional movement of phospholipids. PLSCR3 is expressed in a wide variety of tissues but is not found in brain, liver or testis. It is involved in the regulation of mitochondrial respiratory function, morphology and apoptotic responses. More specifically, PLSCR3 is responsible for mediating the transport of cardiolipin from the inner mitochondrial membrane to the outer mitochondrial membrane. Cardiolipin is a major polyglycerophospholipid that plays a role in the regulation of mitochondrial enzymes involved in the generation of ATP. PLSCR3 activity is activated/phosphorylated by PKC δ and PLSCR3 functions as a downstream effector in PKC δ -induced apoptosis.

CHROMOSOMAL LOCATION

Genetic locus: PLSCR3 (human) mapping to 17p13.1; Plscr3 (mouse) mapping to 11 B3.

SOURCE

PLSCR3 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PLSCR3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-68122 P, (100 μ g 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

PLSCR3 (N-15) is recommended for detection of PLSCR3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PLSCR3 (N-15) is also recommended for detection of PLSCR3 in additional species, including bovine.

Suitable for use as control antibody for PLSCR3 siRNA (h): sc-62828, PLSCR3 siRNA (m): sc-62829, PLSCR3 shRNA Plasmid (h): sc-62828-SH, PLSCR3 shRNA Plasmid (m): sc-62829-SH, PLSCR3 shRNA (h) Lentiviral Particles: sc-62828-V and PLSCR3 shRNA (m) Lentiviral Particles: sc-62829-V.

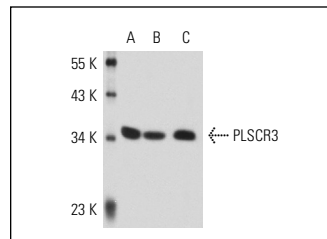
Molecular Weight of PLSCR3: 32 kDa.

Positive Controls: Sol8 cell lysate: sc-2249, mouse lung extract: sc-2390 or PLSCR3 (m): 293T Lysate: sc-125835.

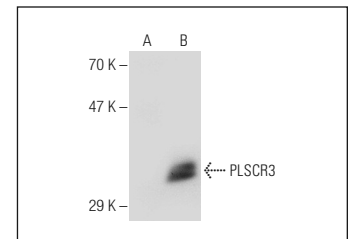
RECOMMENDED SECONDARY REAGENTS

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.

DATA



PLSCR3 (N-15): sc-68122. Western blot analysis of PLSCR3 expression in adipose-treated 3T3-L1 (A) and Sol8 (B) whole cell lysates and mouse lung tissue extract (C).



PLSCR3 (N-15): sc-68122. Western blot analysis of PLSCR3 expression in non-transfected: sc-117752 (A) and mouse PLSCR3 transfected: sc-125835 (B) 293T whole cell lysates.

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.

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Try **PLSCR3 (SQ-9): sc-100808**, our highly recommended monoclonal alternative to PLSCR3 (N-15).