

Slp2 (T-12): sc-162228

BACKGROUND

Slp2 (synaptotagmin-like protein 2), also known as exophilin-4, is a 895 amino acid peripheral membrane protein. Slp2 is believed to act as a Rab effector protein and may play a role in vesicle trafficking. Localized to the melanosome membrane and the intracytoplasmic membrane, Slp2 contains one Slp homology domain, two C2 domains and one Rab-binding domain. The Slp homology domain has been shown to bind specifically to the GTP-bound form of Rab 27a. Slp2 is expressed as two isoforms produced by alternative splicing.

REFERENCES

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3. Strom, M., et al. 2002. A family of Rab 27-binding proteins. Melanophilin links Rab 27a and Myosin Va function in melanosome transport. *J. Biol. Chem.* 277: 25423-25430.
4. Fukuda, M. 2003. Slp4-a/granuphilin-a inhibits dense-core vesicle exocytosis through interaction with the GDP-bound form of Rab 27a in PC12 cells. *J. Biol. Chem.* 278: 15390-15396.
5. Yu, M., et al. 2007. Exophilin4/Slp2-a targets glucagon granules to the plasma membrane through unique Ca²⁺-inhibitory phospholipid-binding activity of the C2A domain. *Mol. Biol. Cell* 18: 688-696.
6. Kesari, A., et al. 2008. Dysferlin deficiency shows compensatory induction of Rab 27a/Slp2a that may contribute to inflammatory onset. *Am. J. Pathol.* 173: 1476-1487.
7. Menasche, G., et al. 2008. A newly identified isoform of Slp2a associates with Rab 27a in cytotoxic T cells and participates to cytotoxic granule secretion. *Blood* 112: 5052-5062.
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CHROMOSOMAL LOCATION

Genetic locus: SYTL2 (human) mapping to 11q14.1; Sytl2 (mouse) mapping to 7 E1.

SOURCE

Slp2 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Slp2 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-162228 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Slp2 (T-12) is recommended for detection of Slp2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Slp3 or Slp5.

Slp2 (T-12) is also recommended for detection of Slp2 in additional species, including equine, canine and avian.

Suitable for use as control antibody for Slp2 siRNA (h): sc-96277, Slp2 siRNA (m): sc-153604, Slp2 shRNA Plasmid (h): sc-96277-SH, Slp2 shRNA Plasmid (m): sc-153604-SH, Slp2 shRNA (h) Lentiviral Particles: sc-96277-V and Slp2 shRNA (m) Lentiviral Particles: sc-153604-V.

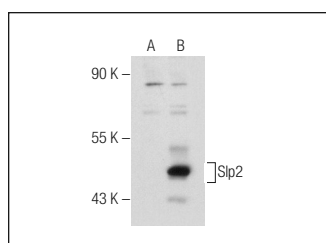
Molecular Weight of Slp2: 105 kDa.

Positive Controls: Slp2 (h): 293T Lysate: sc-370989.

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



Slp2 (T-12): sc-162228. Western blot analysis of Slp2 expression in non-transfected: sc-117752 (A) and human Slp2 transfected: sc-370989 (B) 293T whole cell lysates.

STORAGE

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

RESEARCH USE

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