SANTA CRUZ BIOTECHNOLOGY, INC.

SCAMP1 (N-15): sc-13614



BACKGROUND

Secretory carrier membrane proteins (SCAMPs) are components of the post Golgi membranes and are invovled in endocytosis, vesicle recycling and membrane trafficking. The structural features of SCAMPs include multiple N-terminal NPF repeats and four highly conserved transmembrane regions. These NPF repeats frequently interact with EH domain proteins and aid in the budding of transport vesicles from the plasma membrane or the Golgi complex. Endocytic budding at the plasma membrane and vesicle budding at the *trans*-Golgi complex facilitates binding of SCAMP proteins to EH domain proteins. SCAMPs exist as distinct but related proteins that include SCAMP1, SCAMP2 and SCAMP3. Tyrosine-phosphorylation by the epidermal growth factor-receptor of SCAMP1 and SCAMP3 suggests that SCAMPs are regulated by phosphorylation. Although SCAMPs are ubiquitously expressed throughout all tissue, in neural tissue the synaptic vesicles express a particularly high concentration of SCAMP1.

CHROMOSOMAL LOCATION

Genetic locus: SCAMP1 (human) mapping to 5q14.1; Scamp1 (mouse) mapping to 13 D1.

SOURCE

SCAMP1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SCAMP1 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-13614 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

SCAMP1 (N-15) is recommended for detection of SCAMP1 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).

SCAMP1 (N-15) is also recommended for detection of SCAMP1 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for SCAMP1 siRNA (h): sc-41290, SCAMP1 siRNA (m): sc-41291, SCAMP1 shRNA Plasmid (h): sc-41290-SH, SCAMP1 shRNA Plasmid (m): sc-41291-SH, SCAMP1 shRNA (h) Lentiviral Particles: sc-41290-V and SCAMP1 shRNA (m) Lentiviral Particles: sc-41291-V.

Molecular Weight of SCAMP1: 37 kDa.

Positive Controls: SCAMP1 (m): 293T Lysate: sc-123368, rat brain extract: sc-2392 or mouse brain extract: sc-2253.

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





SCAMP1 (N-15): sc-13614. Western blot analysis of SCAMP1 expression in mouse brain (A) and rat brain (B) tissue extracts.

SCAMP1 (N-15): sc-13614. Western blot analysis of SCAMP1 expression in non-transfected: sc-117752 (A) and mouse SCAMP1 transfected: sc-123368 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Tang, Y.P., et al. 2007. Sexually dimorphic SCAMP1 expression in the forebrain motor pathway for song production of juvenile zebra finches. Dev. Neurobiol. 67: 474-482.
- Tang, Y.P. and Wade, J. 2011. Developmental changes in the sexually dimorphic expression of secretory carrier membrane protein 1 and its colocalisation with androgen receptor protein in the zebra finch song system. J. Neuroendocrinol. 23: 584-590.

STORAGE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed Try SCAMP1 (D-1): sc-398154 or SCAMP1 (G-8): sc-393236, our highly recommended monoclonal alternatives to SCAMP1 (N-15).

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