

ProSAPiP1 (C-16): sc-85843

BACKGROUND

The ProSAP family of proteins contain many protein-protein interaction domains and serve as scaffolding mediators within the post-synaptic density (PSD) of excitatory brain synapses. The PSD is an electron-dense structure underneath the post-synaptic plasma membrane of excitatory synapses that anchors and clusters glutamate receptors opposite to the pre-synaptic neurotransmitter release site. Shank proteins contain PDZ modular domains that coordinate the synaptic localization of ion channels, receptors, signaling enzymes and cell adhesion molecules. The PDZ domain mediates protein-protein interactions via the recognition of a conserved sequence motif at the C-terminus of their target protein(s). ProSAPiP1 (proline rich synapse associated protein interacting protein 1) is a 673 amino acid protein that interacts with the PDZ domain of Shank 3. ProSAPiP1 expression is brain-specific with highest expression within the cerebellum, hippocampus and cerebral cortex.

REFERENCES

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- Redecker, P., et al. 2007. Secretory granules of hypophyseal and pancreatic endocrine cells contain proteins of the neuronal postsynaptic density. *Cell Tissue Res.* 328: 49-55.
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CHROMOSOMAL LOCATION

Genetic locus: ProSAPiP1 (human) mapping to 20p13; Prosap1 (mouse) mapping to 2 F1.

SOURCE

ProSAPiP1 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ProSAPiP1 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-85843 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ProSAPiP1 (C-16) is recommended for detection of ProSAPiP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for ProSAPiP1 siRNA (h): sc-76256, ProSAPiP1 siRNA (m): sc-152481, ProSAPiP1 shRNA Plasmid (h): sc-76256-SH, ProSAPiP1 shRNA Plasmid (m): sc-152481-SH, ProSAPiP1 shRNA (h) Lentiviral Particles: sc-76256-V and ProSAPiP1 shRNA (m) Lentiviral Particles: sc-152481-V.

Molecular Weight of ProSAPiP1: 75 kDa.

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) 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.

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.

PROTOCOLS

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