



Nap-22 (C-13): sc-32598

BACKGROUND

Neuronal axonal membrane protein NAP-22, also designated 22 kDa neuronal tissue-enriched acidic protein or Brain acid soluble protein (BASP1 protein), is a Ca²⁺-dependent calmodulin-binding protein that is important for neuronal sprouting and plasticity. Nap-22 is abundant in brain nerve terminals, and is also present in significant amounts in kidney, testis and lymphoid tissue. Nap-22 undergoes N-terminal myristoylation for membrane localization. It has been characterized as a major protein of neuronal rafts, which are known to preferentially bind membranes containing cholesterol. Nap-22 is a crucial protein active in neurite outgrowth and synaptic plasticity

REFERENCES

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3. Zakharov, VV., et al. 2003. Natural N-terminal fragments of brain abundant myristoylated protein BASP1. *Biochim. Biophys. Acta* 1622: 14-19.
4. Epanand, R.M., et al. 2004. Cholesterol-dependent partitioning of PtdIns(4,5)P₂ into membrane domains by the N-terminal fragment of NAP-22 (neuronal axonal myristoylated membrane protein of 22 kDa). *Biochem. J.* 379: 527-532.
5. Iino, S., et al. 2004. Motor, sensory and autonomic nerve terminals containing Nap-22 immunoreactivity in the rat muscle. *Brain. Res.* 1002: 142-150.
6. Epanand, R.F., et al. 2005. Induction of raft-like domains by a myristoylated Nap-22 peptide and its Tyr mutant. *FEBS J.* 272: 1792-1803.
7. Mosevitsky, M.I., et al. 2005. Nerve ending "signal" proteins GAP-43, MARCKS, and BASP1. *Int. Rev. Cytol.* 245: 245-325.
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CHROMOSOMAL LOCATION

Genetic locus: BASP1 (human) mapping to 5p15.1-p14; Basp1 (mouse) mapping to 15 B1.

SOURCE

Nap-22 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Nap-22 of human origin.

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.

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-32598 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Nap-22 (C-13) is recommended for detection of Nap-22 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 Nap-22 siRNA (h): sc-44610 and Nap-22 siRNA (m): sc-44611.

Molecular Weight of Nap-22: 22 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.

PROTOCOLS

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