

Nap-22 (N-13): sc-32837

BACKGROUND

Neuronal axonal membrane protein Nap-22, also designated neuronal tissue-enriched acidic protein or brain acid soluble protein (BASP1), 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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- Eband, 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.
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- Mosevitsky, M.I. 2005. Nerve ending "signal" proteins GAP-43, MARCKS, and BASP1. *Int. Rev. Cytol.* 245: 245-325.
- Morris, J.S., et al. 2006. Involvement of axonal guidance proteins and their signaling partners in the developing mouse mammary gland. *J. Cell. Physiol.* 206: 16-24.

CHROMOSOMAL LOCATION

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

SOURCE

Nap-22 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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.

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-515648 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Nap-22 (N-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, Nap-22 shRNA Plasmid (h): sc-44610-SH and Nap-22 shRNA (h) Lentiviral Particles: sc-44610-V.

Molecular Weight of Nap-22: 22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.

SELECT PRODUCT CITATIONS

- Sanchez-Nino, M.D., et al. 2015. Albumin-induced apoptosis of tubular cells is modulated by BASP1. *Cell Death Dis.* 6: e1644.

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.