

# Nap-22 (E-14): sc-32597

## BACKGROUND

Neuronal axonal membrane protein Nap-22, also designated neuronal tissue-enriched acidic protein or brain acid soluble protein (BASP1), is a Ca<sup>2+</sup>-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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- Epanand, R.M., et al. 2004. Cholesterol-dependent partitioning of PtdIns(4,5)P<sub>2</sub> 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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- 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.
- 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; Basp1 (mouse) mapping to 15 B1.

## SOURCE

Nap-22 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-32597 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Nap-22 (E-14) 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), 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).

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.

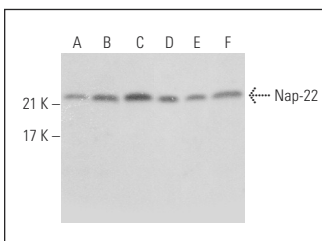
Molecular Weight of Nap-22: 22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or IMR-32 cell lysate: sc-2409.

## 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



Nap-22 (E-14): sc-32597. Western blot analysis of Nap-22 expression in RAW 264.7 (A), NIH/3T3 (B), IMR-32 (C), HeLa (D), Jurkat (E) and K-562 (F) whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.