

Neuron navigator 1 (S-14): sc-161934

BACKGROUND

Neuron navigator 1, also known as Unc-53 homolog 1, Steerin-1 and POMFIL3 (pore membrane and/or filament-interacting-like protein 3), is a 1,877 amino acid cytoplasmic protein that is involved in neuronal migration. Neuron navigator 1 is widely expressed at low levels, though highest expression is found in both adult and fetal nervous tissue. Through interaction with tubulin, Neuron navigator 1 associates with a subset of microtubule plus ends present in the growth cone. Overexpression of Neuron navigator 1 leads to microtubule bundling, whereas a reduction of its levels causes loss of directionality in the migration of pontine cell leading processes. There are seven isoforms of Neuron navigator 1 that are produced as a result of alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: NAV1 (human) mapping to 1q32.1; Nav1 (mouse) mapping to 1 E4.

SOURCE

Neuron navigator 1 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Neuron navigator 1 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-161934 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Neuron navigator 1 (S-14) is recommended for detection of Neuron navigator 1 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); non cross-reactive with Neuron navigator 2 or Neuron navigator 3.

Neuron navigator 1 (S-14) is also recommended for detection of Neuron navigator 1 in additional species, including canine and porcine.

Suitable for use as control antibody for Neuron navigator 1 siRNA (h): sc-88753, Neuron navigator 1 siRNA (m): sc-149934, Neuron navigator 1 shRNA Plasmid (h): sc-88753-SH, Neuron navigator 1 shRNA Plasmid (m): sc-149934-SH, Neuron navigator 1 shRNA (h) Lentiviral Particles: sc-88753-V and Neuron navigator 1 shRNA (m) Lentiviral Particles: sc-149934-V.

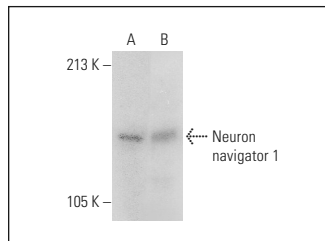
Molecular Weight of Neuron navigator 1: 203 kDa.

Positive Controls: T24 cell lysate: sc-2292, SK-N-MC cell lysate: sc-2237 or rat brain extract: sc-2392.

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



Neuron navigator 1 (S-14): sc-161934. Western blot analysis of Neuron navigator 1 expression in T24 whole cell lysate (A) and rat brain tissue extract (B).

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.



Try **Neuron navigator 1 (G-12): sc-398641**, our highly recommended monoclonal alternative to Neuron navigator 1 (S-14).