SANTA CRUZ BIOTECHNOLOGY, INC.

NAIP (G-20): sc-11060

BACKGROUND

NAIP (for neuronal apoptosis inhibitory protein) is a protein that inhibits apoptosis of neurons and other cell types and its gene is often mutated in severe cases of spinal muscular atrophy, a disease characterized by motor neuron degeneration. NAIP (mostly copy 2) mRNA transcripts are expressed in macrophage-rich tissues, such as spleen, lung and liver, and are abundant in primary macrophages. NAIP is expressed in mouse macrophages, in the cell line RAW 264.7, in anterior horn and motor cortex neurons of normal brains, in human fetal neurons and in adult choroid plexus cells. NAIP expression is increased after phagocytic events and during infection with *L. pneumophila*. There are at least three NAIP gene copies that encode full length mRNA and possible functional proteins, NAIP1, 2 and 3.

REFERENCES

1. Roy, N., et al. 1995. The gene for neuronal apoptosis inhibitory protein is partially deleted in individuals with spinal muscular atrophy. Cell 80: 167-178.
2. Lefebvre, S., et al. 1995. Identification and characterization of a spinal muscular atrophy-determining gene. Cell 80: 155-165.
3. Diez, E., et al. 2000. The neuronal apoptosis inhibitory protein (NAIP) is expressed in macrophages and is modulated after phagocytosis and during intracellular infection with *Legionella pneumophila*. J. Immunol. 164: 1470-1477.
4. Liston, P., et al. 1996. Suppression of apoptosis in mammalian cells by NAIP and a related family of IAP genes. Nature 379: 349-353.
5. Xu, D.G., et al. 1997. Elevation of neuronal expression of NAIP reduces ischemic damage in the rat hippocampus. Nat. Med. 3: 997-1004.
6. Yaraghi, Z., et al. 1998. Cloning and characterization of the multiple murine homologues of NAIP (neuronal apoptosis inhibitory protein). Genomics 51: 107-113.
7. Pari, G., et al. 2000. Immunolocalization of NAIP in the human brain and spinal cord. J. Neuroreport 11: 9-14.

CHROMOSOMAL LOCATION

Genetic locus: NAIP (human) mapping to 5q13.1.

SOURCE

NAIP (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NAIP 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-11060 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

NAIP (G-20) is recommended for detection of NAIP of 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 NAIP1 siRNA (h): sc-42038, NAIP1 shRNA Plasmid (h): sc-42038-SH and NAIP1 shRNA (h) Lentiviral Particles: sc-42038-V.

Molecular Weight of NAIP: 160 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.

SELECT PRODUCT CITATIONS

1. Lukiw, W.J., et al. 2009. Upregulation of micro-RNA-221 (miRNA-221; chr Xp11.3) and caspase-3 accompanies downregulation of the survivin-1 homolog BIRC1 (NAIP) in glioblastoma multiforme (GBM). J. Neurooncol. 91: 27-32.

STORAGE

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

PROTOCOLS

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