

NP2 (h4): 293T Lysate: sc-172406

BACKGROUND

Long pentraxins are a family of highly conserved proteins that are expressed in the brain and central nervous system and form multimeric complexes. Neuronal pentraxin 1 (NP1), NP2 and neuronal pentraxin receptor (NPR) are members of the long pentraxins that represent a neuronal uptake pathway that may function during synapse formation and remodeling. The NP1 gene is located on chromosome 17q25.3 and the protein product mediates the uptake of synaptic material, including the presynaptic snake venom toxin, taipoxin. NP2, whose function is unknown, is located on chromosome 7q22.1 and like NP1 contains several potential N-linked glycosylation sites. NPR is expressed on the cell membrane and can form heteropentamers with NP1 and NP2 that can be released from the cell membrane by proteolysis.

REFERENCES

1. Hsu, Y.C. and Perin, M.S. 1995. Human neuronal pentraxin II (NPTX2): conservation, genomic structure and chromosomal localization. *Genomics* 28: 220-227.
2. Goodman, A.R., et al. 1996. Long pentraxins: an emerging group of proteins with diverse functions. *Cytokine Growth Factor Rev.* 7: 191-202.
3. Omeis, I.A., et al. 1996. Mouse and human neuronal pentraxin I (NPTX1): conservation, genomic structure, and chromosomal localization. *Genomics* 36: 543-545.
4. Polentarutti, N., et al. 2000. Inducible expression of the long pentraxin PTX3 in the central nervous system. *J. Neuroimmunol.* 106: 87-94.
5. Kirkpatrick, L.L., et al. 2000. Biochemical interactions of the neuronal pentraxins. Neuronal pentraxin (NP) receptor binds to taipoxin and taipoxin-associated calcium-binding protein 49 via NP1 and NP2. *J. Biol. Chem.* 275: 17786-17792.

CHROMOSOMAL LOCATION

Genetic locus: NPTX2 (human) mapping to 7q22.1.

PRODUCT

NP2 (h4): 293T Lysate represents a lysate of human NP2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

NP2 (h4): 293T Lysate is suitable as a Western Blotting positive control for human reactive NP2 antibodies. Recommended use: 10-20 µl per lane.

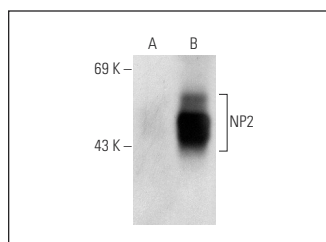
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NP2 (G-9): sc-166035 is recommended as a positive control antibody for Western Blot analysis of enhanced human NP2 expression in NP2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



NP2 (G-9): sc-166035. Western blot analysis of NP2 expression in non-transfected: sc-117752 (A) and human NP2 transfected: sc-172406 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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