SANTA CRUZ BIOTECHNOLOGY, INC.

NOPE (S-14): sc-165123



BACKGROUND

NOPE (neighbor of Punc E11) is a 1,250 amino acid protein that is highly similar to Punc (putative neuronal cell adhesion molecule). Both NOPE and Punc are transmembrane proteins that belong to the immunoglobulin (lg) superfamily, which includes deleted in colorectal cancer (DCC), a cell surface receptor involved in embryonic development. NOPE contains five Fibronectin type-III (FnIII) repeats and four Ig-like C2-type repeats, which suggests a role for NOPE in embryonic differentiation and cell adhesion. Unlike the highly homologous extracellular domains of NOPE and Punc, their cytoplasmic domains are very diverged. NOPE is expressed during embryonic development of the notochord, skeletal muscle and ventricular zone of the nervous system. NOPE can also be expressed in the hippocampus of the adult brain.

REFERENCES

- Salbaum, J.M. 1999. Genomic structure and chromosomal localization of the mouse gene Punc. Mamm. Genome 10: 107-111.
- 2. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 604184. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Gruppuso, P.A., Boylan, J.M. and Vaslet, C.A. 2000. Identification of candidate growth-regulating genes that are overexpressed in late gestation fetal liver in the rat. Biochim. Biophys. Acta 1494: 242-247.
- 4. Salbaum, J.M. and Kappen, C. 2000. Cloning and expression of NOPE, a new mouse gene of the immunoglobulin superfamily related to guidance receptors. Genomics 64: 15-23.
- Yang, W., Li, C. and Mansour, S.L. 2001. Impaired motor coordination in mice that lack Punc. Mol. Cell. Biol. 21: 6031-6043.
- Toyoda, R., Nakamura, H. and Watanabe, Y. 2005. Identification of Protogenin, a novel immunoglobulin superfamily gene expressed during early chick embryogenesis. Gene Expr. Patterns 5: 778-785.

CHROMOSOMAL LOCATION

Genetic locus: NOPE (human) mapping to 15q22.31; Nope (mouse) mapping to 9 C.

SOURCE

NOPE (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of NOPE of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165123 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

NOPE (S-14) is recommended for detection of NOPE of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 NOPE siRNA (h): sc-90016, NOPE siRNA (m): sc-150034, NOPE shRNA Plasmid (h): sc-90016-SH, NOPE shRNA Plasmid (m): sc-150034-SH, NOPE shRNA (h) Lentiviral Particles: sc-90016-V and NOPE shRNA (m) Lentiviral Particles: sc-150034-V.

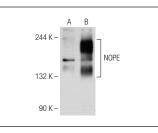
Molecular Weight of NOPE: 134 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or NOPE (h): 293T Lysate: sc-171126.

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.





NOPE (S-14): sc-165123. Western blot analysis of NOPE expression in non-transfected: sc-11752 (**A**) and human NOPE transfected: sc-171126 (**B**) 293T whole cell lysates.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try NOPE (A-10): sc-398452 or NOPE (27L-2): sc-100280, our highly recommended monoclonal alternatives to NOPE (S-14).