



NOPE (m): 293 Lysate: sc-179017

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 (Ig) 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

1. Salbaum, J.M. 1999. Genomic structure and chromosomal localization of the mouse gene Punc. *Mamm. Genome* 10: 107-111.
2. Gruppiso, 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.
3. 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.
4. Yang, W., Li, C. and Mansour, S.L. 2001. Impaired motor coordination in mice that lack Punc. *Mol. Cell. Biol.* 21: 6031-6043.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604184. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. 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: Igdcc4 (mouse) mapping to 9 C.

PRODUCT

NOPE (m): 293 Lysate represents a lysate of mouse NOPE transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

NOPE (m): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive NOPE antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

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.

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.