

NETO2 (3E3): sc-517104

BACKGROUND

NETO2 (neuropilin (NRP) and tolloid (TLL)-like 2), also known as BTCL2 (brain-specific transmembrane protein containing 2 CUB and one LDL-receptor class A domains protein 2), is a 525 amino acid single-pass type I membrane protein that contains 2 CUB domains and one LDL-receptor class A domain. Expressed as multiple alternatively spliced isoforms, NETO2 is thought to play a role in the development and maintenance of neuronal circuitry, possibly playing a role in proper brain function. The gene encoding NETO2 maps to human chromosome 16, which is associated with a variety of genetic disorders, encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- Stöhr, H., et al. 2002. A novel gene encoding a putative transmembrane protein with two extracellular CUB domains and a low-density lipoprotein class A module: isolation of alternatively spliced isoforms in retina and brain. *Gene* 286: 223-231.
- Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607974. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Demir, E., et al. 2005. Giant axonal neuropathy: clinical and genetic study in six cases. *J. Neurol. Neurosurg. Psychiatr.* 76: 825-832.
- Rakha, E.A., et al. 2006. Chromosome 16 tumor-suppressor genes in breast cancer. *Genes Chromosomes Cancer* 45: 527-535.
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CHROMOSOMAL LOCATION

Genetic locus: NETO2 (human) mapping to 16q12.1; Neto2 (mouse) mapping to 8 C3.

SOURCE

NETO2 (3E3) is a mouse monoclonal antibody raised against amino acids 426-525 representing partial length NETO2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

NETO2 (3E3) is recommended for detection of NETO2 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

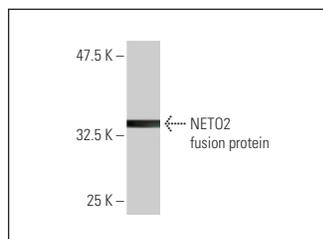
Suitable for use as control antibody for NETO2 siRNA (h): sc-75903, NETO2 siRNA (m): sc-75904, NETO2 shRNA Plasmid (h): sc-75903-SH, NETO2 shRNA Plasmid (m): sc-75904-SH, NETO2 shRNA (h) Lentiviral Particles: sc-75903-V and NETO2 shRNA (m) Lentiviral Particles: sc-75904-V.

Molecular Weight of NETO2: 59 kDa.

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, 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).

DATA



NETO2 (3E3): sc-517104. Western blot analysis of human recombinant NETO2 fusion protein.

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.