

NET-4 (J-21): sc-133811

BACKGROUND

NET-4, also known as TSPAN5 (tetraspanin 5) or TM4SF9, is a 268 amino acid multi-pass membrane protein that belongs to the tetraspanin family and is thought to play a role in signal transduction events related to cell development, activation, growth and motility. The gene encoding NET-4 maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

1. Todd, S.C., Doctor, V.S. and Levy, S. 1998. Sequences and expression of six new members of the tetraspanin/TM4SF family. *Biochim. Biophys. Acta.* 1399: 101-104.
2. Serru, V., Dessen, P., Boucheix, C. and Rubinstein, E. 2000. Sequence and expression of seven new tetraspans. *Biochim. Biophys. Acta.* 1478: 159-163.
3. Berditshevski, F. 2001. Complexes of tetraspanins with integrins: more than meets the eye. *J. Cell Sci.* 114: 4143-4151.
4. Hübner, K., Windoffer, R., Hutter, H. and Leube, R.E. 2002. Tetraspan vesicle membrane proteins: synthesis, subcellular localization, and functional properties. *Int. Rev. Cytol.* 214: 103-159.
5. Yunta, M. and Lazo, P.A. 2003. Tetraspanin proteins as organisers of membrane microdomains and signalling complexes. *Cell. Signal.* 15: 559-564.
6. Tarrant, J.M., Robb, L., van Spriel, A.B. and Wright, M.D. 2003. Tetraspanins: molecular organisers of the leukocyte surface. *Trends Immunol.* 24: 610-617.

CHROMOSOMAL LOCATION

Genetic locus: TSPAN5 (human) mapping to 4q23; Tspan5 (mouse) mapping to 3 H1.

SOURCE

NET-4 (J-21) is an affinity purified rabbit polyclonal antibody raised against synthetic NET-4 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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.

APPLICATIONS

NET-4 (J-21) is recommended for detection of NET-4 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 NET-4 siRNA (h): sc-89102, NET-4 siRNA (m): sc-149914, NET-4 shRNA Plasmid (h): sc-89102-SH, NET-4 shRNA Plasmid (m): sc-149914-SH, NET-4 shRNA (h) Lentiviral Particles: sc-89102-V and NET-4 shRNA (m) Lentiviral Particles: sc-149914-V.

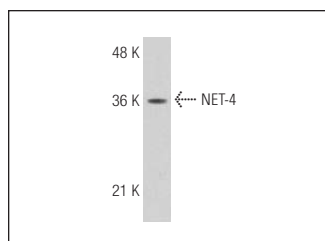
Molecular Weight of NET-4: 30 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



NET-4 (J-21): sc-133811. Western blot analysis of NET-4 expression in Jurkat whole cell lysate.

RESEARCH USE

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