

NET-6 (K-14): sc-160581

BACKGROUND

NET-6, also known as TSPAN13 (tetraspanin-13) or TM4SF13 (transmembrane 4 superfamily member 13), is a 204 amino acid multi-pass membrane protein that belongs to the tetraspanin (TM4SF) family. Members of the tetraspanin family are cell-surface proteins that are characterized by the presence of four hydrophobic domains and mediate signal transduction events that play a role in the regulation of cell development, activation, growth, motility, differentiation, and cancer. Considered molecular facilitators, tetraspanin proteins may regulate vesicle fusion and fission. The gene encoding NET-6 maps to human chromosome 7, which houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Tsiouras, P., Myers, J.C., Ramirez, F. and Prockop, D.J. 1983. Restriction fragment length polymorphism associated with the pro α 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. *J. Clin. Invest.* 72: 1262-1267.
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. Iwasaki, S., Usami, S., Abe, S., Isoda, H., Watanabe, T. and Hoshino, T. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. *Arch. Otolaryngol. Head Neck Surg.* 127: 705-708.
4. Berditschevski, F. 2001. Complexes of tetraspanins with integrins: more than meets the eye. *J. Cell Sci.* 114: 4143-4151.
5. Reiner, O., Sapoznik, S. and Sapir, T. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. *Neuromolecular Med.* 8: 547-565.
6. Huang, H., Sossey-Alaoui, K., Beachy, S.H. and Geradts, J. 2007. The tetraspanin superfamily member NET-6 is a new tumor suppressor gene. *J. Cancer Res. Clin. Oncol.* 133: 761-769.
7. Arencibia, J.M., Martín, S., Perez-Rodríguez, F.J. and Bonnin, A. 2009. Gene expression profiling reveals overexpression of TSPAN13 in prostate cancer. *Int. J. Oncol.* 34: 457-463.

CHROMOSOMAL LOCATION

Genetic locus: TSPAN13 (human) mapping to 7p21.1.

SOURCE

NET-6 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of NET-6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160581 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NET-6 (K-14) is recommended for detection of NET-6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other NET family members.

NET-6 (K-14) is also recommended for detection of NET-6 in additional species, including bovine and porcine.

Suitable for use as control antibody for NET-6 siRNA (h): sc-89789, NET-6 shRNA Plasmid (h): sc-89789-SH and NET-6 shRNA (h) Lentiviral Particles: sc-89789-V.

Molecular Weight of NET-6: 22 kDa.

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) 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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.