

# TSPAN6 (N-13): sc-244512

## BACKGROUND

Tetraspanins are a group of hydrophobic membrane proteins that interact with a wide variety of proteins including intracellular signaling molecules, integrins and membrane receptors. Members of the tetraspanin family are characterized by the presence of four hydrophobic domains and play a role in cell development, activation, growth and motility. TSPAN6 (tetraspanin-6), also known as A15 homolog, putative NF $\kappa$ B-activating protein 321, T245 protein, tetraspanin TM4-D or TM4SF6 (transmembrane 4 superfamily member 6), is a 245 amino acid multi-pass membrane protein that belongs to the tetraspanin (TM4SF) family. TSPAN6 is expressed at high levels in brain, with lower levels of expression found in colon, lung, pancreas, prostate, retina and melanocytes, as well as fetal heart, liver and spleen. The gene encoding TSPAN6 maps to the human X chromosome.

## REFERENCES

1. Todd, S.C., et al. 1998. Sequences and expression of six new members of the tetraspanin/TM4SF family. *Biochim. Biophys. Acta* 1399: 101-104.
2. Maeda, K., et al. 1998. Cloning and characterization of a novel human gene, TM4SF6, encoding a protein belonging to the transmembrane 4 superfamily, and mapped to Xq22. *Genomics* 52: 240-242.
3. Berditshevski, F. 2001. Complexes of tetraspanins with integrins: more than meets the eye. *J. Cell Sci.* 114: 4143-4151.
4. Clark, H.F., et al. 2003. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. *Genome Res.* 13: 2265-2270.
5. Tiwari-Woodruff, S.K., et al. 2004. Developmental expression of OAP-1/Tspan-3, a member of the tetraspanin superfamily. *J. Neurosci. Res.* 77: 166-173.
6. Ross, M.T., et al. 2004 The DNA sequence of the human X chromosome. *Nature* 434: 325-337.
7. Chen, L., et al. 2008. Clinicopathological significance of overexpression of TSPAN1, Ki67 and CD34 in gastric carcinoma. *Tumori* 94: 531-538.

## CHROMOSOMAL LOCATION

Genetic locus: TSPAN6 (human) mapping to Xq22.1; Tspan6 (mouse) mapping to X E3.

## SOURCE

TSPAN6 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of TSPAN6 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-244512 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TSPAN6 (N-13) is recommended for detection of TSPAN6 of mouse, rat and 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).

TSPAN6 (N-13) is also recommended for detection of TSPAN6 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TSPAN6 siRNA (h): sc-90862, TSPAN6 siRNA (m): sc-154729, TSPAN6 shRNA Plasmid (h): sc-90862-SH, TSPAN6 shRNA Plasmid (m): sc-154729-SH, TSPAN6 shRNA (h) Lentiviral Particles: sc-90862-V and TSPAN6 shRNA (m) Lentiviral Particles: sc-154729-V.

Molecular Weight of TSPAN6: 28 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](http://www.scbt.com) or our catalog for detailed protocols and support products.