

TSPAN11 (G-14): sc-249107

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. TSPAN11 (tetraspanin-11) is a 253 amino acid multi-pass membrane protein belonging to the tetraspanin (TM4SF) family. The gene encoding TSPAN11 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

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. Domínguez-Jimenez, C., et al. 2001. Involvement of $\alpha 3$ integrin/tetraspanin complexes in the angiogenic response induced by angiotensin II. *FASEB J.* 15: 1457-1459.
3. Berditchevski, F. 2001. Complexes of tetraspanins with integrins: more than meets the eye. *J. Cell Sci.* 114: 4143-4151.
4. Yokoyama, T., et al. 2003. A case of Kniest dysplasia with retinal detachment and the mutation analysis. *Am. J. Ophthalmol.* 136: 1186-1188.
5. Chen, L., et al. 2008. Clinicopathological significance of overexpression of TSPAN1, Ki67 and CD34 in gastric carcinoma. *Tumori* 94: 531-538.
6. Benussi, D.G., et al. 2009. Trisomy 12p and monosomy 4p: phenotype-genotype correlation. *Genet. Test Mol. Biomarkers* 13: 199-204.
7. Scholz, C.J., et al. 2009. Tspan-1 is a tetraspanin preferentially expressed by mucinous and endometrioid subtypes of human ovarian carcinomas. *Cancer Lett.* 275: 198-203.
8. Chen, L., et al. 2009. TSPAN1 protein expression: a significant prognostic indicator for patients with colorectal adenocarcinoma. *World J. Gastroenterol.* 15: 2270-2276.
9. Bennett, G., et al. 2011. A functional and transcriptomic analysis of NET1 bioactivity in gastric cancer. *BMC Cancer* 11: 50.

CHROMOSOMAL LOCATION

Genetic locus: TSPAN11 (human) mapping to 12p11.21.

SOURCE

TSPAN11 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSPAN11 of human origin.

STORAGE

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

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-249107 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSPAN11 (G-14) is recommended for detection of TSPAN11 of human and rat 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 TSPAN family members.

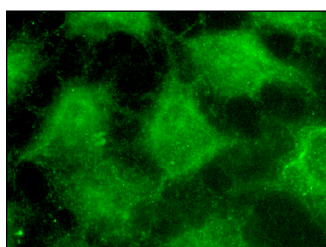
TSPAN11 (G-14) is also recommended for detection of TSPAN11 in additional species, including equine, canine and porcine.

Molecular Weight of TSPAN11: 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.

DATA



TSPAN11 (G-14): sc-249107. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

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.