

TSPAN8 (D-14): sc-169702

BACKGROUND

TSPAN8 (tetraspanin 8), also known as TM4SF3 or CO-029, is a 237 amino acid multi-pass membrane protein that belongs to the tetraspanin family of transmembrane proteins and is thought to play a role in signal transduction events that influence cell development, activation, growth and motility. Localized to the cell membrane, TSPAN8 is expressed in colon, gastric, renal and pancreatic cancers, strongly suggesting a role in cancer formation and metastasis. The gene encoding TSPAN8 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. Szala, S., Kasai, Y., Steplewski, Z., Rodeck, U., Koprowski, H. and Linnenbach, A.J. 1990. Molecular cloning of cDNA for the human tumor-associated antigen CO-029 and identification of related transmembrane antigens. *Proc. Natl. Acad. Sci. USA* 87: 6833-6837.
2. Gwynn, B., Eicher, E.M. and Peters, L.L. 1996. Genetic localization of Cd63, a member of the transmembrane 4 superfamily, reveals two distinct loci in the mouse genome. *Genomics* 35: 389-391.
3. Serru, V., Le Naour, F., Billard, M., Azorsa, D.O., Lanza, F., Boucheix, C. and Rubinstein, E. 1999. Selective tetraspan-integrin complexes (CD81/ α 4 β 1, CD151/ α 3 β 1, CD151/ α 6 β 1) under conditions disrupting tetraspan interactions. *Biochem. J.* 340: 103-111.
4. Berditchevski, F. 2001. Complexes of tetraspanins with integrins: more than meets the eye. *J. Cell Sci.* 114: 4143-4151.
5. Kanetaka, K., Sakamoto, M., Yamamoto, Y., Yamasaki, S., Lanza, F., Kanematsu, T. and Hirohashi, S. 2001. Overexpression of tetraspanin CO-029 in hepatocellular carcinoma. *J. Hepatol.* 35: 637-642.
6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 600769. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: TSPAN8 (human) mapping to 12q21.1.

SOURCE

TSPAN8 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TSPAN8 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-169702 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSPAN8 (D-14) is recommended for detection of TSPAN8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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.

Suitable for use as control antibody for TSPAN8 siRNA (h): sc-95856, TSPAN8 shRNA Plasmid (h): sc-95856-SH and TSPAN8 shRNA (h) Lentiviral Particles: sc-95856-V.

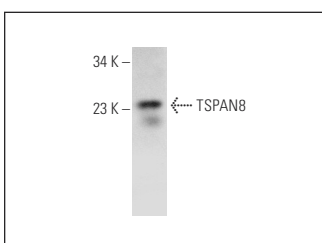
Molecular Weight of TSPAN8: 27 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



TSPAN8 (D-14): sc-169702. Western blot analysis of TSPAN8 expression in COLO 320DM whole cell lysate.

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.