

Tenascin-C (F-17): sc-9872

BACKGROUND

The Tenascin family of extracellular matrix proteins includes Tenascin (also known as cytotactin or Tenascin-C), Tenascin-R (also designated Restrictin or Janusin) and Tenascin-X. Tenascin proteins function as substrate-adhesion molecules (SAMs) and are involved in regulating numerous developmental processes, such as morphogenetic cell migration and organogenesis. The Tenascin family proteins arise from various splicing events in the region of coding for FNIII repeats. Tenascin and Tenascin-X are expressed in several tissues during embryogenesis, and in adult tissues undergoing active remodeling, such as healing wounds and tumors. Tenascin-R (TN-R) is expressed on the surface of neurons and glial cells.

REFERENCES

1. Jung, M., Pesheva, P., Schachner, M. and Trotter, J. 1993. Astrocytes and neurons regulate the expression of the neural recognition molecule Janusin by cultured oligodendrocytes. *Glia* 9: 163-175.
2. Schachner, M., Taylor, J., Bartsch, U. and Pesheva, P. 1994. The perplexing multifunctionality of Janusin, a Tenascin-related molecule. *Perspect. Dev. Neurobiol.* 2: 33-41.
3. Chiquet-Ehrismann, R. 1995. Tenascins, a growing family of extracellular matrix proteins. *Experientia* 51: 853-862.
4. Elefteriou, F., Exposito, J.Y., Garrone, R. and Lethias, C. 1997. Characterization of the bovine Tenascin-X. *J. Biol. Chem.* 272: 22866-22874.
5. Faissner, A. 1997. The Tenascin gene family in axon growth and guidance. *Cell Tissue Res.* 290: 331-341.
6. Srinivasan, J., Schachner, M. and Catterall, W.A. 1998. Interaction of voltage-gated sodium channels with the extracellular matrix molecules Tenascin-C and Tenascin-R. *Proc. Natl. Acad. Sci. USA* 95: 15753-15757.

CHROMOSOMAL LOCATION

Genetic locus: TNC (human) mapping to 9q33.1; Tnc (mouse) mapping to 4 C1.

SOURCE

Tenascin-C (F-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Tenascin-C of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9872 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Tenascin-C (F-17) is recommended for detection of Tenascin-C of mouse, rat, human, zebrafish and *Xenopus* 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).

Tenascin-C (F-17) is also recommended for detection of Tenascin-C in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Tenascin-C siRNA (h): sc-43186, Tenascin-C siRNA (m): sc-43187, Tenascin-C shRNA Plasmid (h): sc-43186-SH, Tenascin-C shRNA Plasmid (m): sc-43187-SH, Tenascin-C shRNA (h) Lentiviral Particles: sc-43186-V and Tenascin-C shRNA (m) Lentiviral Particles: sc-43187-V.

Molecular Weight (predicted) of Tenascin-C: 220 kDa.

Molecular Weight (observed) of Tenascin-C: 220-260 kDa.

Positive Controls: U-87 MG cell lysate: sc-2411 or Hs68 cell lysate: sc-2230.

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.

SELECT PRODUCT CITATIONS

1. Fang, B., Li, Y., Song, Y. and Li, N. 2010. Isolation and characterization of multipotent progenitor cells from the human fetal aorta wall. *Exp. Biol. Med.* 235: 130-138.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Tenascin-C (E-9): sc-25328** or **Tenascin-C (300-3): sc-13578**, our highly recommended monoclonal alternatives to Tenascin-C (F-17). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Tenascin-C (E-9): sc-25328**.