

# Tenascin-N (G-18): sc-54349

## BACKGROUND

The Tenascin family of extracellular matrix proteins includes Tenascin (also designated cytotactin or Tenascin-C), Tenascin-R (also designated restrictin or janusin), Tenascin-X and Tenascin-N (also designated TNN, TN-W or Tenascin-W). 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 coding for Fibronectin (FN) III repeats. Tenascin-C 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, and Tenascin-N, although evident during development, is predominantly expressed by neurons in the adult central nervous system. Tenascin-N may play a role in neurite outgrowth and migration functioning as a repulsive molecule in the hippocampus.

## REFERENCES

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- Schachner, M., et al. 1994. The perplexing multifunctionality of Janusin, a Tenascin-related molecule. *Perspect. Dev. Neurobiol.* 2: 33-41.
- Chiquet-Ehrismann, R. 1995. Tenascins, a growing family of extracellular matrix proteins. *Experientia* 51: 853-862.
- Faissner, A. 1997. The Tenascin gene family in axon growth and guidance. *Cell Tissue Res.* 290: 331-341.
- Elefteriou, F., et al. 1997. Characterization of the bovine Tenascin-X. *J. Biol. Chem.* 272: 22866-22874.
- Srinivasan, J., et al. 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.
- Neidhardt, J., et al. 2003. Tenascin-N: characterization of a novel member of the tenascin family that mediates neurite repulsion from hippocampal explants. *Mol. Cell. Neurosci.* 23: 193-209.

## CHROMOSOMAL LOCATION

Genetic locus: TNN (human) mapping to 1q25.1; Tnn (mouse) mapping to 1 H2.1.

## SOURCE

Tenascin-N (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Tenascin-N 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-54349 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Tenascin-N (G-18) is recommended for detection of Tenascin-N of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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-N (G-18) is also recommended for detection of Tenascin-N in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Tenascin-N siRNA (h): sc-106609, Tenascin-N siRNA (m): sc-154188, Tenascin-N shRNA Plasmid (h): sc-106609-SH, Tenascin-N shRNA Plasmid (m): sc-154188-SH, Tenascin-N shRNA (h) Lentiviral Particles: sc-106609-V and Tenascin-N shRNA (m) Lentiviral Particles: sc-154188-V.

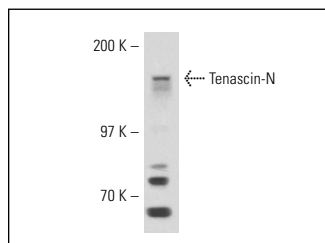
Molecular Weight of Tenascin-N: 144 kDa.

Positive Controls: C6 whole cell lysate: sc-364373.

## 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Tenascin-N (G-18): sc-54349. Western blot analysis of Tenascin-N expression in C6 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.