

# Tenascin-R (9): sc-136098

## BACKGROUND

The Tenascin family of extracellular matrix proteins includes Tenascin (also designated cytotoxin 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

- Jung, M., et al. 1993. Astrocytes and neurons regulate the expression of the neural recognition molecule janusin by cultured oligodendrocytes. *Glia* 9: 163-175.
- 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.
- Lundell, A., et al. 2004. Structural basis for interactions between Tenascins and lectican C-type lectin domains: evidence for a crosslinking role for tenascins. *Structure* 12: 1495-1506.
- Liao, H., et al. 2005. Tenascin-R plays a role in neuroprotection via its distinct domains that coordinate to modulate the microglia function. *J. Biol. Chem.* 280: 8316-8323.

## CHROMOSOMAL LOCATION

Genetic locus: TNR (human) mapping to 1q25.1; Tnr (mouse) mapping to 1 H1.

## SOURCE

Tenascin-R (9) is a mouse monoclonal antibody raised against amino acids 24-198 of Tenascin-R of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

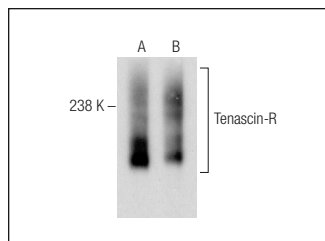
Tenascin-R (9) is recommended for detection of Tenascin-R of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Tenascin-R siRNA (h): sc-36639, Tenascin-R siRNA (m): sc-36640, Tenascin-R shRNA Plasmid (h): sc-36639-SH, Tenascin-R shRNA Plasmid (m): sc-36640-SH, Tenascin-R shRNA (h) Lentiviral Particles: sc-36639-V and Tenascin-R shRNA (m) Lentiviral Particles: sc-36640-V.

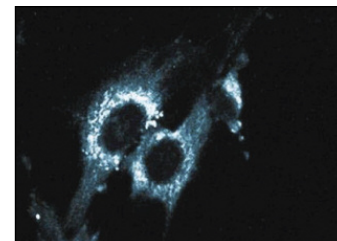
Molecular Weight of Tenascin-R isoforms: 160/180 kDa.

Positive Controls: mouse brain extract: sc-2253, rat brain extract: sc-2392 or U-87 MG cell lysate: sc-2411.

## DATA



Tenascin-R (9): sc-136098. Western blot analysis of Tenascin-R expression in mouse brain (A) and rat brain (B) tissue extracts.



Tenascin-R (9): sc-136098. Immunofluorescence staining of WI-38 cells showing cytoplasmic localization.

## SELECT PRODUCT CITATIONS

- Lee, P.K., et al. 2017. Network-based characterization of the synaptic proteome reveals that removal of epigenetic regulator Prmt8 restricts proteins associated with synaptic maturation. *J. Neurochem.* 140: 613-628.

## 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) for detailed protocols and support products.