

Tenascin-R (E-18): sc-9875

BACKGROUND

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

- 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.
- Eleftheriou, 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 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Tenascin-R 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-9875 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tenascin-R (E-18) 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)], 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).

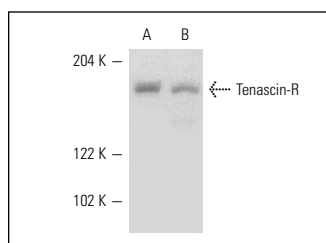
Tenascin-R (E-18) is also recommended for detection of Tenascin-R in additional species, including equine, canine, bovine, porcine and avian.

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.

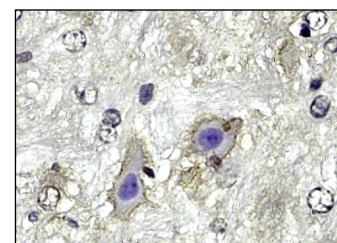
Molecular Weight of Tenascin-R isoforms: 160/180 kDa.

Positive Controls: T98G cell lysate: sc-2294, U-87 MG cell lysate: sc-2411 or rat brain extract: sc-2392.

DATA



Tenascin-R (E-18): sc-9875. Western blot analysis of Tenascin-R expression in T98G (A) and U-87 MG (B) whole cell lysates.



Tenascin-R (E-18): sc-9875. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse brain tissue showing extracellular localization.

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.

MONOS
Satisfaction
Guaranteed

Try **Tenascin-R (A-2): sc-376341** or **Tenascin-R (9): sc-136098**, our highly recommended monoclonal alternatives to Tenascin-R (E-18).