SANTA CRUZ BIOTECHNOLOGY, INC.

Tenascin-R (H-60): sc-25718

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. Jung, M., et al. 1993. Astrocytes and neurons regulate the expression of the neural recognition molecule Janusin by cultured oligodendrocytes. Glia 9: 163-175.
2. Schachner, M., et al. 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. Faissner, A. 1997. The Tenascin gene family in axon growth and guidance. Cell Tissue Res. 290: 331-341.
5. Elefteriou, F., et al. 1997. Characterization of the bovine Tenascin-X. J. Biol. Chem. 272: 22866-22874.
6. 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.
7. 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.
8. 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 (H-60) is a rabbit polyclonal antibody raised against amino acids 1-60 mapping at the N-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.

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 (H-60) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Tenascin-R (H-60) is also recommended for detection of Tenascin-R in additional species, including equine, canine and porcine.

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.

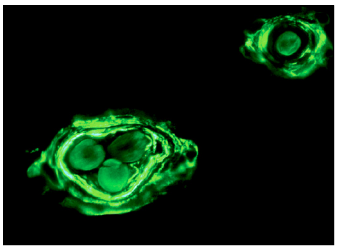
Molecular Weight of Tenascin-R isoforms: 160/180 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Tenascin-R (H-60): sc-25718. Immunofluorescence staining of normal mouse skin frozen section showing extracellular staining.

RESEARCH USE

For research use only, not for use in diagnostic procedures.