SANTA CRUZ BIOTECHNOLOGY, INC.

Tenascin-C (N-19): sc-9871

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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., 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.

CHROMOSOMAL LOCATION

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

SOURCE

Tenascin-C (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-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-9871 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tenascin-C (N-19) is recommended for detection of Tenascin-C of mouse, rat and human 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), 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).

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.

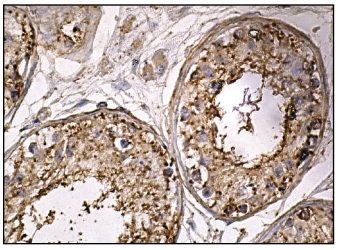
Molecular Weight (observed) of Tenascin-C: 220-260 kDa.

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

STORAGE

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

DATA



Tenascin-C (N-19): sc-9871. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing membrane and cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

SELECT PRODUCT CITATIONS

1. Schumacher, K., et al. 2003. Characterization of microfibers at the interface between the renal collecting duct ampulla and the cap condensate. Nephron Exp. Nephrol. 95: e43-e54.
2. Hanekamp, E.E., et al. 2003. Consequences of loss of progesterone receptor expression in development of invasive endometrial cancer. Clin. Cancer Res. 9: 4190-4199.
3. Dalkowski, A., et al. 2003. Cryotherapy modifies synthetic activity and differentiation of keloidal fibroblasts *in vitro*. Exp. Dermatol. 12: 673-681.
4. Takayama, G., et al. 2006. Periostin: a novel component of subepithelial fibrosis of bronchial asthma downstream of IL-4 and IL-13 signals. J. Allergy Clin. Immunol. 118: 98-104.
5. Imura, K., et al. 2008. Novel localization of Tenascin-X in adult mouse leptomeninges and choroid plexus. Ann. Anat. 190: 324-328.
6. Imura, K., et al. 2009. Identification of the novel localization of Tenascin X in the monkey choroid plexus and comparison with the mouse. Eur. J. Histochem. 53: 225-231.
7. Xu, B., et al. 2012. RhoA/ROCK, cytoskeletal dynamics, and focal adhesion kinase are required for mechanical stretch-induced tenogenic differentiation of human mesenchymal stem cells. J. Cell. Physiol. 227: 2722-2729.

RESEARCH USE

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