SANTA CRUZ BIOTECHNOLOGY, INC.

Tenascin-X (F-11): sc-271594

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.
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.

CHROMOSOMAL LOCATION

Genetic locus: TNXB (human) mapping to 6p21.33; Tnxb (mouse) mapping to 17 B1.

SOURCE

Tenascin-X (F-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 4231-4244 at the C-terminus of Tenascin-X of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Tenascin-X (F-11) is available conjugated to agarose (sc-271594 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271594 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271594 PE), fluorescein (sc-271594 FITC), Alexa Fluor® 488 (sc-271594 AF488), Alexa Fluor® 546 (sc-271594 AF546), Alexa Fluor® 594 (sc-271594 AF594) or Alexa Fluor® 647 (sc-271594 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271594 AF680) or Alexa Fluor® 790 (sc-271594 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271594 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

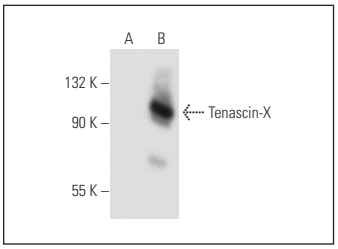
Tenascin-X (F-11) is recommended for detection of Tenascin-X of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution 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).

Suitable for use as control antibody for Tenascin-X siRNA (h): sc-43188, Tenascin-X siRNA (m): sc-43189, Tenascin-X shRNA Plasmid (h): sc-43188-SH, Tenascin-X shRNA Plasmid (m): sc-43189-SH, Tenascin-X shRNA (h) Lentiviral Particles: sc-43188-V and Tenascin-X shRNA (m) Lentiviral Particles: sc-43189-V.

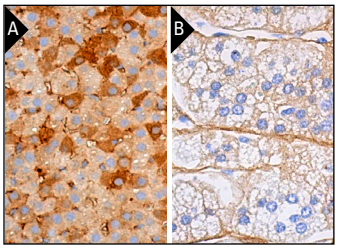
Molecular Weight of Tenascin-X isoforms: 500/220/80 kDa.

Positive Controls: Tenascin-X (h): 293T Lysate: sc-115036.

DATA



Tenascin-X (F-11): sc-271594. Western blot analysis of Tenascin-X expression in non-transfected: sc-117752 (**A**) and human Tenascin-X transfected: sc-115036 (**B**) 293T whole cell lysates.



Tenascin-X (F-11): sc-271594. Immunoperoxidase staining of formalin fixed, paraffin-embedded rat adrenal gland tissue showing cytoplasmic staining of glandular cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing extracellular matrix staining (**B**).

SELECT PRODUCT CIATIONS

1. Jana, S., et al. 2018. Disparate remodeling of the extracellular matrix and proteoglycans in failing pediatric versus adult hearts. J. Am. Heart Assoc. 7: e010427.
2. Liot, S., et al. 2020. Loss of Tenascin-X expression during tumor progression: a new pan-cancer marker. Matrix Biol. Plus 6-7: 100021.

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 for detailed protocols and support products.