

# Tenascin-C (E-9): sc-25328

## BACKGROUND

The Tenascin family of extracellular matrix proteins includes Tenascin-C (also designated cytotactin or Tenascin), Tenascin-R (also designated restrictin, TN-R 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-C 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 is expressed on the surface of neurons and glial cells.

## CHROMOSOMAL LOCATION

Genetic locus: TNC (human) mapping to 9q33.1.

## SOURCE

Tenascin-C (E-9) is a mouse monoclonal antibody raised against amino acids 1601-1900 of Tenascin-C of human origin.

## PRODUCT

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

Tenascin-C (E-9) is available conjugated to agarose (sc-25328 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-25328 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-25328 PE), fluorescein (sc-25328 FITC), Alexa Fluor® 488 (sc-25328 AF488), Alexa Fluor® 546 (sc-25328 AF546), Alexa Fluor® 594 (sc-25328 AF594) or Alexa Fluor® 647 (sc-25328 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-25328 AF680) or Alexa Fluor® 790 (sc-25328 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

Tenascin-C (E-9) is recommended for detection of Tenascin-C of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:500), 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-C siRNA (h): sc-43186, Tenascin-C shRNA Plasmid (h): sc-43186-SH and Tenascin-C shRNA (h) Lentiviral Particles: sc-43186-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.

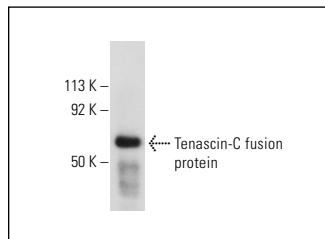
## RESEARCH USE

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

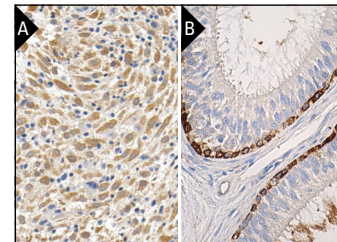
## STORAGE

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

## DATA



Tenascin-C (E-9): sc-25328. Western blot analysis of human recombinant Tenascin-C fusion protein.



Tenascin-C (E-9): sc-25328. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic and decidual cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of basal cells in seminiferous ducts (B).

## SELECT PRODUCT CITATIONS

- Pazzaglia, L., et al. 2010. Differential gene expression in classic giant cell tumours of bone: Tenascin-C as biological risk factor for local relapses and metastases. *Histopathology* 57: 59-72.
- Wang, Z., et al. 2018. Functional regeneration of tendons using scaffolds with physical anisotropy engineered via microarchitectural manipulation. *Sci. Adv.* 4: eaat4537.
- Arciniegas, E., et al. 2019. Galectin-1 and galectin-3 and their potential binding partners in the dermal thickening of keloid tissues. *Am. J. Dermatopathol.* 41: 193-204.
- Huang, W., et al. 2020. Origins and proliferative states of human oligodendrocyte precursor cells. *Cell* 182: 594-608.e11.
- Zhang, R., et al. 2021. GPR30 knockdown weakens the capacity of CAF in promoting prostate cancer cell invasion via reducing macrophage infiltration and M2 polarization. *J. Cell. Biochem.* E-published.
- Mun, S., et al. 2022. Transcriptome profile of membrane and extracellular matrix components in ligament-fibroblastic progenitors and cementoblasts differentiated from human periodontal ligament cells. *Genes* 13: 659.
- Hasan, M.R., et al. 2023. RAB23 regulates musculoskeletal development and patterning. *Front. Cell Dev. Biol.* 11: 1049131.
- Shukla, A., et al. 2024. A single chain variable fragment antibody (Tn 64) cognate to fibronectin type III repeats promotes corneal wound healing by inhibiting fibrosis. *Int. Immunopharmacol.* 133: 112029.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.