

Tenascin-R (A-2): sc-376341

BACKGROUND

The Tenascin family of extracellular matrix proteins includes Tenascin (also designated cytostatin 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.
- Elefteriou, F., et al. 1997. Characterization of the bovine Tenascin-X. *J. Biol. Chem.* 272: 22866-22874.
- Faissner, A. 1997. The Tenascin gene family in axon growth and guidance. *Cell Tissue Res.* 290: 331-341.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: TNR (human) mapping to 1q25.1; Tnr (mouse) mapping to 1 H1.

SOURCE

Tenascin-R (A-2) is a mouse monoclonal antibody raised against amino acids 1-60 mapping at the N-terminus of Tenascin-R of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Tenascin-R (A-2) is available conjugated to agarose (sc-376341 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376341 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376341 PE), fluorescein (sc-376341 FITC), Alexa Fluor[®] 488 (sc-376341 AF488), Alexa Fluor[®] 546 (sc-376341 AF546), Alexa Fluor[®] 594 (sc-376341 AF594) or Alexa Fluor[®] 647 (sc-376341 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376341 AF680) or Alexa Fluor[®] 790 (sc-376341 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Tenascin-R (A-2) is recommended for detection of Tenascin-R 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

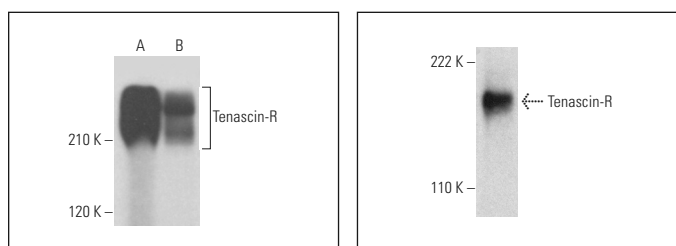
Molecular Weight of Tenascin-R isoforms: 160/180 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, rat brain extract: sc-2392 or mouse brain extract: sc-2253.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



Tenascin-R (A-2): sc-376341. Western blot analysis of Tenascin-R expression in rat brain (A) and mouse brain (B) tissue extracts.

Tenascin-R (A-2): sc-376341. Western blot analysis of Tenascin-R expression in SH-SY5Y whole cell lysate.

SELECT PRODUCT CITATIONS

- Alonge, K.M., et al. 2020. Hypothalamic perineuronal net assembly is required for sustained diabetes remission induced by fibroblast growth factor 1 in rats. *Nat. Metab.* 2: 1025-1033.

STORAGE

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

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