

Tenascin C (D16C4) Rabbit mAb

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	240	Rabbit IgG	#P24821	3371

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Tenascin C (D16C4) Rabbit mAb recognizes endogenous levels of total Tenascin C protein. This antibody also cross-reacts with a protein of unknown origin at 120 kDa.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human Tenascin C protein.

Background

Tenascin C is a large hexameric extracellular matrix glycoprotein that exhibits de-adhesive effects on cell-matrix interaction, enhancing cell proliferation and motility in most cell types. It is highly expressed in remodeling tissues during embryonic development and under pathological conditions in adults, and research studies have shown markedly increased expression in cancerous tissues (1,2). Tenascin C has been implicated in a variety of cellular processes relevant to atherosclerosis, including cell proliferation, migration, and apoptosis. Expression of Tenascin C is tightly controlled in adults and is upregulated in tissues undergoing wound healing (3). In development, the expression of Tenascin C is known to be associated with epithelial-mesenchymal transition (EMT) events, including gastrulation and formation of the neural crest, endocardial cushion, and secondary palate (1). Investigators have shown that Tenascin C is a key determinant of the tumor stroma and is involved in the initiation of tumorigenesis and progression to metastasis (2). Immature and mature astrocytes, radial glial cells, Schwann cells, and a subset of neurons express Tenascin C. Upon CNS trauma or exposure of neurons to excitotoxic agents, Tenascin C expression is upregulated by glial cells. Research studies have shown that Tenascin C is involved in guidance of migrating axons and neurons, synaptic plasticity, and neuronal regeneration, promoting spinal cord regeneration after injury (4).

Background References

1. Imanaka-Yoshida, K. (2012) *Circ J* 76, 2513-20.
2. Yoshimura, H. et al. (2011) *Histol Histopathol* 26, 297-305.
3. Minear, M.A. et al. (2011) *Hum Genet* 129, 641-54.
4. Chen, J. et al. (2010) *Mol Ther* 18, 1769-77.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no

force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.