Tenascin C (D16C4) Rabbit mAb

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

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

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
WB: Western Blotting
IP: Immunoprecipitation

Cross-Reactivity Key

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