Tenascin C (D16C4) Rabbit mAb

**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 that it 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).

**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 References:**

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

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at −20°C. Do not aliquot the antibody.

**Recommended Antibody Dilutions:**
- Western blotting: 1:1000
- Immunoprecipitation: 1:50

For product specific protocols please see the web page for this product at www.cellsignal.com.