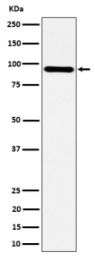
TNS4 Antibody / Tensin 4 / Cten [clone 30T19] (FY12820)

Catalog No.	Formulation	Size
FY12820	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30T19
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q8IZW8
Applications	Western blot: 1:500-1:2000
Limitations	This TNS4 antibody is available for research use only.



Western blot analysis of TNS4 expression in human HepG2 cell lysate using TNS4 antibody. A predominant band is observed at ~90 kDa, consistent with full-length TNS4/Cten migrating above its predicted ~78-80 kDa due to post-translational modification and gel mobility effects; lower fragments, when present, likely reflect caspase-dependent cleavage.

Description

TNS4 antibody detects tensin 4, encoded by the TNS4 gene. This protein is also known as Cten, cancer associated tensin, and tensin like C1 domain containing phosphatase 1 related protein. TNS4 belongs to the tensin family of focal adhesion proteins that link actin cytoskeleton to integrins and signaling molecules. Unlike other tensins, TNS4 lacks the

phosphatase domain but retains SH2 and PTB domains that mediate signaling interactions. TNS4 localizes to focal adhesions and regulates adhesion, migration, and invasion. Its expression is low in normal tissues but highly upregulated in many cancers.

TNS4 antibody is widely applied in cancer biology, cell adhesion studies, and migration research. TNS4 expression is elevated in colorectal, gastric, breast, and lung cancers, where it promotes epithelial mesenchymal transition, invasion, and metastasis. By detecting TNS4, researchers can evaluate how altered focal adhesion dynamics contribute to tumor progression. Its restricted expression in normal tissues and strong induction in tumors make it a promising biomarker for oncogenesis.

Applications of TNS4 antibody include western blotting, immunohistochemistry, and immunofluorescence. Western blot assays detect TNS4 protein in tumor cell lysates, immunohistochemistry maps expression in cancer biopsies, and immunofluorescence highlights localization at adhesion sites. These methods provide robust experimental approaches for studying cancer associated focal adhesion remodeling.

TNS4 interacts with integrins, focal adhesion kinase, and actin filaments, coordinating adhesion and signaling. Unlike other tensins, its lack of phosphatase activity suggests specialized roles in signaling rather than enzymatic regulation. By applying TNS4 antibody, scientists can dissect how this atypical tensin supports oncogenic processes. TNS4 expression correlates with poor prognosis, therapy resistance, and metastatic potential in multiple cancers.

Beyond cancer, TNS4 has roles in wound healing and tissue repair, where transient expression supports migration and remodeling. Its evolutionary divergence from other tensins highlights specialized functions. Detection with antibody based assays enables researchers to map these unique contributions across physiology and pathology.

TNS4 antibody from NSJ Bioreagents provides strong specificity for detecting cancer associated tensin. Its validated performance supports reliable results across oncology and adhesion biology, making it a valuable resource for both basic and translational research.

Application Notes

Optimal dilution of the TNS4 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TNS4 was used as the immunogen for the TNS4 antibody.

Storage

Store the TNS4 antibody at -20oC.

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