

Tns (R-19): sc-8888

BACKGROUND

Tensin (Tns) is an actin filament capping protein localized to various types of adherens junctions in muscle and non-muscle cells. Tensin is involved in the maintenance of cellular structure by anchoring actin filaments at the focal adhesion via F-actin binding and capping activities. However, tensin also contains a Src homology 2 (SH2) domain and has the ability to be phosphorylated. Tensin is phosphorylated on tyrosine, serine, and threonine residues, suggesting that it might participate in signal transduction cascades. These diverse characteristics in a single molecule indicate that tensin may be an important link between the cytoskeleton and signal transduction pathways.

REFERENCES

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- Chuang, J.Z., et al. 1995. Molecular cloning, expression, and mapping of the high affinity actin-capping domain of chicken cardiac tensin. *J. Cell Biol.* 128: 1095-1109.
- Haynie, D.T., et al. 1996. The N-terminal domains of tensin and auxilin are phosphatase homologues. *Protein Sci.* 5: 2643-2646.
- Chen, H., et al. 2000. Molecular characterization of human tensin. *Biochem. J.* 351: 403-411.
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- Yamashita, M., et al. 2004. Tensin is potentially involved in extracellular matrix production in mesangial cells. *Histochem. Cell Biol.* 121: 245-254.

CHROMOSOMAL LOCATION

Genetic locus: TNS1 (human) mapping to 2q35; Tns1 (mouse) mapping to 1 C3.

SOURCE

Tns (R-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Tns of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8888 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Tns (R-19) is recommended for detection of tensin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Tns (R-19) is also recommended for detection of tensin in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Tns siRNA (h): sc-44159, Tns siRNA (m): sc-43462, Tns shRNA Plasmid (h): sc-44159-SH, Tns shRNA Plasmid (m): sc-43462-SH, Tns shRNA (h) Lentiviral Particles: sc-44159-V and Tns shRNA (m) Lentiviral Particles: sc-43462-V.

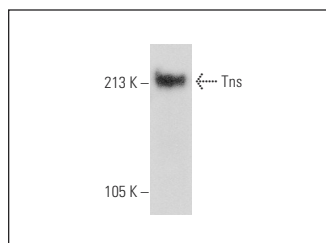
Molecular Weight of Tns: 200 kDa.

Positive Controls: A-10 cell lysate: sc-3806 or rat small intestine extract: sc-364811.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Tns (R-19): sc-8888. Western blot analysis of Tns expression in rat small intestine tissue extract.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.