Tns4 (H-200): sc-98529



The Power to Question

BACKGROUND

The Tensin (Tns) family of proteins is involved in the maintenance of cellular structure by anchoring Actin filaments at the focal adhesion via F-Actin binding and capping activities. Tns proteins contain a Src homology 2 (SH2) domain and have the ability to be phosphorylated, suggesting an additional role in signal transduction cascades. These diverse characteristics indicate that Tns proteins may be important links between the cytoskeleton and signal transduction pathways. Tns4 (tensin 4), also known as CTEN, is a 715 amino acid protein that localizes to focal adhesions and contains one SH2 domain and one phosphatase tensin-type domain. Expressed in placenta and prostate, Tns4 binds to Actin filaments and is thought to be involved in cartilage development, cell migration and apoptosis, and may also play a role in linking signal transduction pathways to the cytoskeleton. Tns4 is subject to post-translational phosphorylation and is down-regulated in prostate cancer cells, suggesting a role in tumor suppression.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TNS4 (human) mapping to 17g21.2.

SOURCE

Tns4 (H-200) is a rabbit polyclonal antibody raised against amino acids 114-313 mapping near the N-terminus of Tns4 of human origin.

PRODUCT

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

APPLICATIONS

Tns4 (H-200) is recommended for detection of Tns4 of 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).

Suitable for use as control antibody for Tns4 siRNA (h): sc-76705, Tns4 shRNA Plasmid (h): sc-76705-SH and Tns4 shRNA (h) Lentiviral Particles: sc-76705-V.

Molecular Weight of Tns4: 90 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit lgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit lgG-HRP: sc-2030 (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 goat anti-rabbit lgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit lgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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



Try **Tns4 (3B8): sc-517073**, our highly recommended monoclonal alternative to Tns4 (H-200).

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