

Tns3 (D-20): sc-55152

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 also contain a Src homology 2 (SH2) domain and have the ability to be phosphorylated, suggesting a role in signal transduction cascades. These diverse characteristics indicate that Tns proteins may be important links between the cytoskeleton and signal transduction pathways. Tns3, also known as TEM6 or TENS1, localizes to the focal adhesions of the plasma membrane. It is predominantly expressed in thyroid and placenta but can also be found in heart, liver, brain, prostate, pancreas, kidney, lung, skeletal muscle and white blood cells. Tns3 is essential for proper growth and development, as suggested by growth retardation and death in a number of Tns3^{-/-} mice.

REFERENCES

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4. Chuang, J.Z., Lin, D.C. and Lin, S. 1995. Molecular cloning, expression, and mapping of the high affinity actin-capping domain of chicken cardiac Tensin. *J. Cell Biol.* 128: 1095-1109.
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CHROMOSOMAL LOCATION

Genetic locus: TNS3 (human) mapping to 7p12.3.

SOURCE

Tns3 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Tns3 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.

Blocking peptide available for competition studies, sc-55152 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tns3 (D-20) is recommended for detection of Tns3 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 Tns3 siRNA (h): sc-63117, Tns3 shRNA Plasmid (h): sc-63117-SH and Tns3 shRNA (h) Lentiviral Particles: sc-63117-V.

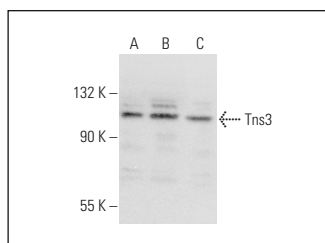
Molecular Weight of Tns3 isoforms 1/2/3/4: 155/129/44/28 kDa.

Positive Controls: A549 cell lysate: sc-2413, Hep G2 cell lysate: sc-2227 or HUV-EC-C whole cell lysate: sc-364180.

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



Tns3 (D-20): sc-55152. Western blot analysis of Tns3 expression in A549 (A), Hep G2 (B) and HUV-EC-C (C) whole cell lysates.

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.