SANTA CRUZ BIOTECHNOLOGY, INC.

TRABD2B (D-20): sc-247642

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TRABD2B (TRAB domain-containing protein 2B), also known as TIKI2 (metalloprotease TIKI2), is a 517 amino acid single-pass type I membrane protein that belongs to the TIKI family. TIKI proteins were named in reference to a mythological large-headed humanoid, as overexpression of TIKI1 (TRABD2A) in *Xenopus* causes head enlargement. TRABD2B and TRABD2A are required for proper head formation by acting as negative regulators of the Wnt signaling pathway. TRABD2B functions as a metalloprotease, which negatively regulates the Wnt signaling pathway by cleaving Wnt-3a and Wnt-5. After cleavage the Wnt proteins become oxidized and form disulfide-bond oligomers, resulting in inactivation. TRABD2B is inhibited by 1,10-phenanthroline, a metalloprotease inhibitor, and EDTA.

REFERENCES

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3. Steele, B.M., Harper, M.T., Smolenski, A.P., Alkazemi, N., Poole, A.W., Fitzgerald, D.J. and Maguire, P.B. 2012. WNT-3a modulates platelet function by regulating small GTPase activity. FEBS Lett. 586: 2267-2272.
4. Lento, W., Congdon, K., Voermans, C., Kritzik, M. and Reya, T. 2013. Wnt signaling in normal and malignant hematopoiesis. Cold Spring Harb. Perspect. Biol. 5: a008011.
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CHROMOSOMAL LOCATION

Genetic locus: TRABD2B (human) mapping to 1p33.

SOURCE

TRABD2B (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TRABD2B 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-247642 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRABD2B (D-20) is recommended for detection of TRABD2B 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 TRABD2B siRNA (h): sc-88454, TRABD2B shRNA Plasmid (h): sc-88454-SH and TRABD2B shRNA (h) Lentiviral Particles: sc-88454-V.

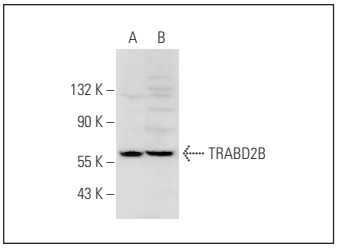
Molecular Weight of TRABD2B: 57 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

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



TRABD2B (D-20): sc-247642. Western blot analysis of TRABD2B expression in Jurkat (**A**) and K-562 (**B**) 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.