SANTA CRUZ BIOTECHNOLOGY, INC.

TSTD2 (P-14): sc-241329

BACKGROUND

TSTD2 (thiosulfate sulfurtransferase/rhodanese-like domain-containing protein 2), also known as C6orf97, is a 516 amino acid protein that contains one rhodanese domain. TSTD2 is post-translationally phosphorylated at serine 269, 464, 468 and 474. Existing as two alternatively spliced isforms, the gene encoding TSTD2 maps to human chromosome 9. Chromosome 9 houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

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2. Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
3. Yu, L.R., et al. 2007. Improved titanium dioxide enrichment of phosphopeptides from HeLa cells and high confident phosphopeptide identification by cross-validation of MS/MS and MS/MS/MS spectra. J. Proteome Res. 6: 4150-4162.
4. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (rendu-osler disease). Respiration 74: 361-378.
5. Dephoure, N., et al. 2008. A quantitative atlas of mitotic phosphorylation. Proc. Natl. Acad. Sci. USA 105: 10762-10767.
6. Zeitz, M.J., et al. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. Chromosome Res. 17: 305-319.

CHROMOSOMAL LOCATION

Genetic locus: TSTD2 (human) mapping to 9q22.33; TSTD2 (mouse) mapping to 4 B1.

SOURCE

TSTD2 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSTD2 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-241329 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TSTD2 (P-14) is recommended for detection of TSTD2 of mouse and human origin, and RGD1310893 of rat 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); non cross-reactive with TSTD1 family members.

TSTD2 (P-14) is also recommended for detection of TSTD2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TSTD2 siRNA (h): sc-92785, TSTD2 siRNA (m): sc-141637, TSTD2 shRNA Plasmid (h): sc-92785-SH, TSTD2 shRNA Plasmid (m): sc-141637-SH, TSTD2 shRNA (h) Lentiviral Particles: sc-92785-V and TSTD2 shRNA (m) Lentiviral Particles: sc-141637-V.

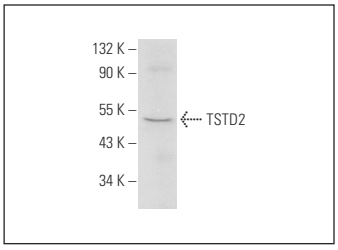
Molecular Weight of TSTD2 isoforms: 58/19 kDa.

Positive Controls: mouse brain extract: sc-2253.

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



TSTD2 (P-14): sc-241329. Western blot analysis of TSTD2 expression in mouse brain tissue extract.

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.