

# TSTD1 (N-16): sc-324457

## BACKGROUND

TSTD1 (Thiosulfate sulfurtransferase/rhodanese-like domain-containing protein 1, KAT) is a 115 amino acid gene product containing one rhodanese domain. TSTD1 is believed to localize to the perinuclear region and is highly expressed in kidney, liver and skeletal muscle. TSTD1 exists as four possible alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 1. Chromosome 1 is the largest chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene, which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration.

## REFERENCES

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6. McClintock, D., et al. 2006. Hutchinson-Gilford progeria mutant lamin A primarily targets human vascular cells as detected by an anti-Lamin A G608G antibody. *Proc. Natl. Acad. Sci. USA* 103: 2154-2159.
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## CHROMOSOMAL LOCATION

Genetic locus: TSTD1 (human) mapping to 1q23.3; Tstd1 (mouse) mapping to 1 H3.

## SOURCE

TSTD1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TSTD1 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-324457 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TSTD1 (N-16) is recommended for detection of TSTD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 TSTD2.

Suitable for use as control antibody for TSTD1 siRNA (m): sc-143346, TSTD1 shRNA Plasmid (m): sc-143346-SH and TSTD1 shRNA (m) Lentiviral Particles: sc-143346-V.

Molecular Weight of TSTD1: 13 kDa.

## 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.