

## TPST-2 (H-300): sc-366089

### BACKGROUND

The tyrosylprotein sulfotransferases TPST-1 and TPST-2 catalyze the sulfation of tyrosine residues within secreted and membrane-bound proteins, such as cell adhesion molecules, G protein-coupled receptors, coagulation factors, serpins, extracellular matrix proteins and hormones. Although both TPST-1 and TPST-2 utilize 3'-phosphoadenosine 5'-phosphosulfate as their sulfate donor, they differ in their substrate specificity. The TPSTs are evolutionarily conserved proteins found in a wide variety of species, including human, mouse, *C. elegans*, and plants. They are ubiquitously expressed in several tissues, including liver, lung, heart and cerebellum. Both TPST-1 and TPST-2 localize to the Golgi complex. Chronic alcohol consumption stimulates a three-fold increase in TPST levels in the gastric mucosa and liver, indicating that TPST may play a role in alcoholism. The genes encoding human TPST-1 and TPST-2 map to chromosomes 7q11.21 and 22q12.1, respectively.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: TPST2 (human) mapping to 22q12.1; Tpst2 (mouse) mapping to 5 F.

### RESEARCH USE

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

### SOURCE

TPST-2 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of TPST-2 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

TPST-2 (H-300) is recommended for detection of TPST-2 of mouse, rat and 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).

TPST-2 (H-300) is also recommended for detection of TPST-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TPST-2 siRNA (h): sc-41077, TPST-2 siRNA (m): sc-41078, TPST-2 shRNA Plasmid (h): sc-41077-SH, TPST-2 shRNA Plasmid (m): sc-41078-SH, TPST-2 shRNA (h) Lentiviral Particles: sc-41077-V and TPST-2 shRNA (m) Lentiviral Particles: sc-41078-V.

### RECOMMENDED SECONDARY REAGENTS

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.