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 have a molecular mass of 50-54 kDa and localize to the Golgi complex. Chronic alcohol consumption stimulates a threefold 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

SOURCE
TPST-1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TPST-1 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-25033 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
TPST-1 (C-19) is recommended for detection of TPST-1 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).

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 or our catalog for detailed protocols and support products.