

Recombinant Full Length Human Thiosulfate Sulfurtransferase (rhodanese), His-tagged

Cat. No. TST-1456H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human TST produced in E.Coli is a single, non-glycosylated polypeptide chain containing 317 amino acids (1-297 a.a) and having a molecular mass of 35.6 kDa. TST is fused to a 20 amino acid His-Tag at N-terminus and purified by conventional chromatography techniques.
Species	Human
Source	E.coli
ProteinLength	1-297 a.a.
Description	TST is a mitochondrial matrix enzyme that is encoded by the nucleus. TST is involved in cyanide detoxification, the formation of iron-sulfur proteins, and the modification of sulfur-containing enzymes. TST catalyzes the chemical reaction of thiosulfate & cyanide to sulfite & thiocyanate (detoxification). TST is part of the transferase family of proteins. TST includes two highly conservative domains, identified as rhodanese homology domains. In mammals, the majority of cyanide is converted to thiocyanate. TST has weak mercaptopyruvate sulfurtransferase activity.
Form	The Rhodanese protein solution contains 20mM Tris-HCl, pH-8 and 10% Glycerol.
Purity	Greater than 95.0% as determined by SDS-PAGE
Physical Appearance	Sterile filtered colorless solution.

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Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MVHQVLYRAL VSTKWLAESI RTGKLGPGRLR
 VLDASWYSPG TREARKEYLE RHVPGASFFD IECCRDTASP YEMMLPSEAG
 FAEYVGRLLGI SNHTHVVVYD GEHLGSFYAP RVWWMFRVFG HRTVSVLNGG
 FRNWLKEGHP VTSEPSRPEP AVFKATLDRS LLKTYEQVLE NLESKRFQLV
 DRSRQGRFLG TEPEPDAVGL DSGHIRGAVN MPFMDFLTED GFEKGPEELR
 ALFQTKKVDL SQPLIATCRK GVTACHVALA AYLCGKPDVA VYDGSWSEWF
 RRAPPESRVS QGKSEKA.

Storage

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

GENE INFORMATION

Gene Name

TST thiosulfate sulfurtransferase (rhodanese) [Homo sapiens]

Official Symbol

TST

Synonyms

TST; thiosulfate sulfurtransferase (rhodanese); RDS; MGC19578; thiosulfate sulfurtransferase; OTTHUMP00000197761

Gene ID

7263

mRNA Refseq

NM_003312

Protein Refseq

NP_003303

MIM

180370

UniProt ID

Q16762

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Chromosome Location	22q13
Pathway	Cysteine and methionine metabolism; Sulfur relay system; 5S rRNA binding
Function	thiosulfate sulfurtransferase activity; transferase activity; transferase activity

Identifiers

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