# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-297aa

**UniProt No.** Q16762

NCBI Accession No. NP\_003303.2

Alternative Names RDS, TST, Rhodanese, Thiosulfate Sulfurtransferase

# **PRODUCT SPECIFICATION**

Molecular Weight 35.5 kDa (317aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by Bradford assay)

**Formulation** Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

**Purity** > 95% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

Thiosulfate sulfurtransferase (TST), also known as Rhodanese, is a mitochondrial enzyme that involved in cyanide detoxification and the modification of sulfur-containing enzymes. This protein contains two highly conservative domains, known as rhodanese homology domains. In mammals, most cyanide is converted to thiocyanate by this enzyme. TST also has weak mercaptopyruvate sulfurtransferase activity. Recombinant TST protein was expressed in E. coli and purified by using conventional chromatography techniques.



#### **Amino acid Sequence**

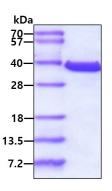
<MGSSHHHHHH SSGLVPRGSH> MVHQVLYRAL VSTKWLAESI RTGKLGPGLR VLDASWYSPG TREARKEYLE RHVPGASFFD IEECRDTASP YEMMLPSEAG FAEYVGRLGI SNHTHVVVYD GEHLGSFYAP RVWWMFRVFG HRTVSVLNGG FRNWLKEGHP VTSEPSRPEP AVFKATLDRS LLKTYEQVLE NLESKRFQLV DSRSQGRFLG TEPEPDAVGL DSGHIRGAVN MPFMDFLTED GFEKGPEELR ALFQTKKVDL SQPLIATCRK GVTACHVALA AYLCGKPDVA VYDGSWSEWF RRAPPESRVS QGKSEKA

#### **General References**

Pallini R., et al. (1991) Biochem Biophys Res Commun. 180(2):887-93. Aita N., et al. (1997) Biochem Biophys Res Commun. 231(1):56-60.

### DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

