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## 32-2564: MPST Recombinant Protein

Alternative Name: 3-mercaptopyruvate sulfurtransferase, MST, MPST, TST2.

## **Description**

Source: Escherichia Coli. MPST Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 321 amino acids (1-297) and having a molecular mass of 35kDa.MPST is fused to a 24 amino acid His-tag at Nterminus & purified by proprietary chromatographic techniques. Mercaptopyruvate Sulfurtransferase (MPST) catalyzes the transfer of a sulfur ion from 3-mercaptopyruvate to cyanide or other thiol compounds. MPST might be involved in cysteine degradation and cyanide detoxification. The MPST enzyme is regulated by oxidative stress and thioredoxin. In oxidative stress conditions, the catalytic cysteine site is transformed to a sulfenate which inhibits the MPST enzyme activity. The reduced thioredoxin cleaves an intersubunit disulfide bond to activate the redox switch and reactivate the enzyme. A deficiency in MPST activity is implicated in a rare inheritable condition known as MCDU (mercaptolactate-cysteine disulfiduria).

## **Product Info**

Amount: 20 µg

Purification: Greater than 95.0% as determined by SDS-PAGE.

The MPST solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 20% glycerol Content:

and 1mM DTT.

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of Storage condition:

time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid

multiple freeze-thaw cycles.

**Amino Acid:** MGSSHHHHHH SSGLVPRGSH MGSHMASPQL CRALVSAQWV AEALRAPRAG QPLQLLDASW

YLPKLGRDAR REFEERHIPG AAFFDIDQCS DRTSPYDHML PGAEHFAEYA GRLGVGAATH VVIYDASDQG LYSAPRVWWM FRAFGHHAVS LLDGGLRHWL RQNLPLSSGK SQPAPAEFRA QLDPAFIKTY EDIKENLESR RFQVVDSRAT GRFRGTEPEP RDGIEPGHIP GTVNIPFTDF LSQEGLEKSP EEIRHLFQEK KVDLSKPLVA TCGSGVTACH VALGAYLCGK PDVPIYDGSW

VEWYMRARPE DVISEGRGKT H.

