

MPST Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP7652a

Specification

MPST Antibody (N-term) Blocking Peptide -Product Information

Primary Accession P25325

MPST Antibody (N-term) Blocking Peptide -Additional Information

Gene ID 4357

Other Names 3-mercaptopyruvate sulfurtransferase, MST, MPST, TST2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP7652a was selected from the N-term region of human MPST. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MPST Antibody (N-term) Blocking Peptide -Protein Information

Name MPST

Synonyms TST2

MPST Antibody (N-term) Blocking Peptide - Background

MPST catalyzes the transfer of a sulfur ion from 3-mercaptopyruvate to cyanide or other thiol compounds. It may be involved in cysteine degradation and cyanide detoxification. There is confusion in literature between this protein (mercaptopyruvate sulfurtransferase, MPST), which appears to be cytoplasmic, and thiosulfate sulfurtransferase (rhodanese, TST, GeneID:7263), which is a mitochondrial protein. Deficiency in MPST activity has been implicated in a rare inheritable disorder known as mercaptolactate-cysteine disulfiduria (MCDU).

MPST Antibody (N-term) Blocking Peptide - References

Billaut-Laden, I., Toxicol. Lett. 165 (2), 101-111 (2006)



Function

Transfer of a sulfur ion to cyanide or to other thiol compounds. Also has weak rhodanese activity. Detoxifies cyanide and is required for thiosulfate biosynthesis. Acts as an antioxidant. In combination with cysteine aminotransferase (CAT), contributes to the catabolism of cysteine and is an important producer of hydrogen sulfide in the brain, retina and vascular endothelial cells. Hydrogen sulfide H(2)S is an important synaptic modulator, signaling molecule, smooth muscle contractor and neuroprotectant. Its production by the 3MST/CAT pathway is regulated by calcium ions.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P97532}. Mitochondrion {ECO:0000250|UniProtKB:P97532}. Cell junction, synapse, synaptosome {ECO:0000250|UniProtKB:Q99J99}

MPST Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides