

### MPST Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7652b

### Specification

## MPST Antibody (C-term) - Product Information

Application	FC, WB,E
Primary Accession	<u>P25325</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	269-297

### **MPST Antibody (C-term) - Additional Information**

Gene ID 4357

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

Target/Specificity

This MPST antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 269-297 amino acids from the C-terminal region of human MPST.

**Dilution** FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** MPST Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### MPST Antibody (C-term) - Protein Information

Name MPST

Synonyms TST2



**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}. Synapse, synaptosome {ECO:0000250|UniProtKB:Q99J99}

### MPST Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### MPST Antibody (C-term) - Images



Western blot analysis of MPST antibody (C-term) (Cat.#AP7652b) in HepG2[][]ane 1[]"nd Hela(lane2) cell line lysates (35ug/lane). MPST (arrow) was detected using the purified Pab.



Western blot analysis of MPST antibody (C-term) (Cat.#AP7652b) in mouse liver tissue lysates (35ug/lane). MPST (arrow) was detected using the purified Pab.



MPST Antibody (C-term) (Cat. #AP7652b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## MPST Antibody (C-term) - 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), 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 (C-term) - References

Billaut-Laden,I., Toxicol. Lett. 165 (2), 101-111 (2006) MPST Antibody (C-term) - Citations

• <u>Neutral aminoaciduria in cystathionine β-synthase-deficient mice: an animal model of homocystinuria.</u>

