

### **MPST Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7652a

### **Specification**

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

Application WB, FC,E Primary Accession P25325

Other Accession P97532, O99J99

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
24-53

### MPST Antibody (N-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 24-53 amino acids from the N-terminal region of human MPST.

## **Dilution**

WB~~1:1000 FC~~1:10~50

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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## MPST Antibody (N-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**

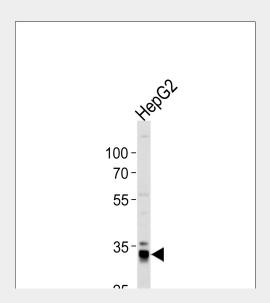
 $\label{lem:cytoplasm} $$ \ensuremath{\mathsf{ECO:0000250}}$ UniProtKB:P97532}. Mitochondrion $$ \ensuremath{\mathsf{ECO:0000250}}$ UniProtKB:P97532}. Synapse, synaptosome $$ \ensuremath{\mathsf{ECO:0000250}}$ UniProtKB:Q99J99}$ 

## MPST Antibody (N-term) - Protocols

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

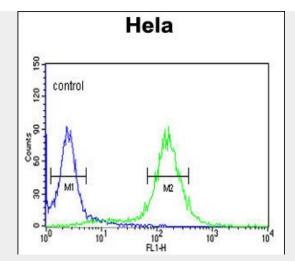
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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



Western blot analysis of lysate from HepG2 cell line, using MPST Antibody (N-term)(Cat. #AP7652a). AP7652a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.





MPST Antibody (N-term) (Cat. #AP7652a) flow cytometric analysis of Hela 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 (N-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, 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) - References

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