

MPST Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7652b

Product Information

Application	WB, FC, E
Primary Accession	P25325
Reactivity	Human
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18649
Calculated MW	33178
Antigen Region	269-297

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

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 H₂S 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}

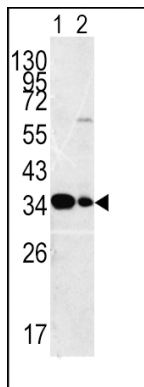
Background

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).

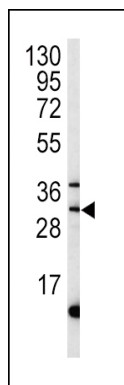
References

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

Images

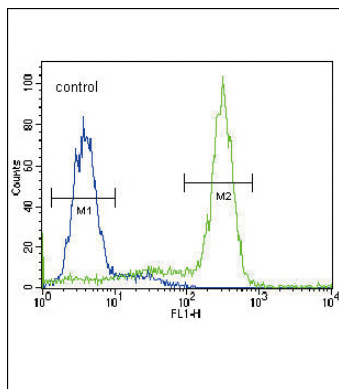


Western blot analysis of MPST antibody (C-term) (Cat.#AP7652b) in HepG2 (lane 1) and HeLa (lane 2) cell line lysates (35ug/lane). MPST (arrow) was detected using the purified Pab.



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.



Citations

- [Neutral aminoaciduria in cystathionine \$\beta\$ -synthase-deficient mice: an animal model of homocystinuria.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.