

# Product datasheet

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ARG44232 anti-MPST antibody

Package: 50 μg Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes MPST

Tested Reactivity Hu

Tested Application FACS, ICC/IF, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name MPST

Species Human

Immunogen Recombinant protein of Human MPST

Conjugation Un-conjugated

Alternate Names MPST; Mercaptopyruvate Sulfurtransferase; TST2; MST 2; TUM1; TRNA Thiouridin Modification Protein

1; 3-Mercaptopyruvate Sulfurtransferase; Human Liver Rhodanese; Testicular Tissue Protein Li 200; EC

2.8.1.2

# **Application Instructions**

Application table	Application	Dilution
	FACS	1-3 μg/1x10^6 cells
	ICC/IF	5 μg/ml
	WB	0.25-0.5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol MPST

Gene Full Name Mercaptopyruvate Sulfurtransferase

Background

This protein encoded by this gene 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). Alternatively spliced transcript variants encoding same or different isoforms have been identified for

this gene.

**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.

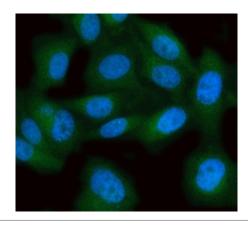
Its production by the 3MST/CAT pathway is regulated by calcium ions.

Calculated Mw 33 kDa

PTM Acetylation, Disulfide bond, Phosphoprotein

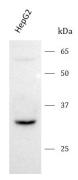
Cellular Localization Cytoplasm, Mitochondrion, Synapse, Synaptosome

## **Images**



### ARG44232 anti-MPST antibody ICC/IF image

Immunofluorescence: PC3 stained with ARG44232 anti-MPST antibody at 5  $\mu$ g/ml dilution.



### ARG44232 anti-MPST antibody WB image

Western blot: HepG2 stained with ARG44232 anti-MPST antibody at 0.5  $\mu\text{g}/\text{mL}$  dilution.