

Rabbit anti-Human MPST Polyclonal Antibody | anti-MPST antibody

Anti-MPST Antibody Picoband

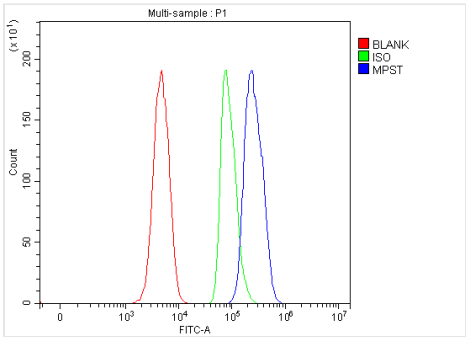
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127241	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

MPST; Polyclonal Antibody; Anti-MPST Antibody Picoband; thioredoxin 2; Thioredoxin; mitochondrial; MTRX; Mt-Trx; Thioredoxin-2; TXN2; TRX2; anti-MPST antibody

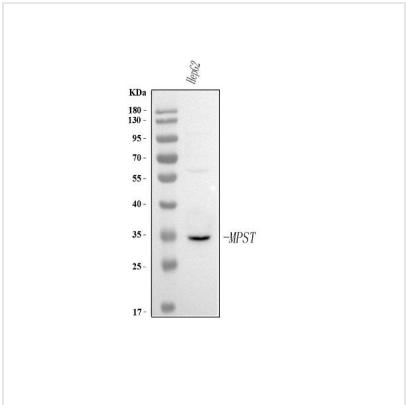
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Widely expressed in adult (at protein level) and fetal tissues.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-MPST antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human MPST recombinant protein (Position: A2-H297).
Subcellular Localization	Mitochondrion
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Important for the control of mitochondrial reactive oxygen species homeostasis, apoptosis regulation and cell viability. Possesses a dithiol-reducing activity.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



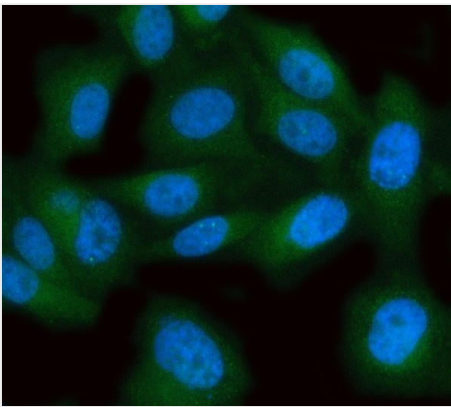
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of SH-SY5Y cells using anti-MPST antibody (AAA127241).Overlay histogram showing SH-SY5Y cells stained with AAA127241 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MPST Antibody (AAA127241, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of MPST using anti-MPST antibody (AAA127241).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human HepG2 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MPST antigen affinity purified polyclonal antibody (#AAA127241) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MPST at approximately 33 kDa. The expected band size for MPST is at 33 kDa.



IF (Immunofluorescence)

Figure 2. IF analysis of MPST using anti-MPST antibody (AAA127241).MPST was detected in an immunocytochemical section of PC3 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-MPST Antibody (AAA127241) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

ADDITIONAL INFORMATION

Related Product Information for anti-MPST antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-MPST antibody	Primary Antibodies; Hematopoietic Progenitors; Immunology; Innate Immunity; Stem Cells; Surface Molecules

References	1. Aita, N., Ishii, K., Akamatsu, Y., Ogasawara, Y., Tanabe, S. Cloning and expression of human liver rhodanese cDNA. Biochem. Biophys. Res. Commun. 231: 56-60, 1997.2. Billaut-Laden, I., Rat, E., Allorge, D., Crunelle-Thibaut, A., Cauffiez, C., Chevalier, D., Lo-Guidice, J.-M., Broly, F. Evidence for a functional genetic polymorphism of the human mercaptopyruvate sulfurtransferase (MPST), a cyanide detoxification enzyme. Toxicol. Lett. 165: 101-111, 2006. 3. Hartz, P. A. Personal Communication. Baltimore, Md. 12/8/2009.
------------	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	61835204
NCBI GeneID	4357
NCBI Accession #	NP_001013454.1
NCBI GenBank Nucleotide #	NM_001013436.2
UniProt Accession #	P25325; O75750; Q6FHN9; A8MZ34; B3KP52; J3KPV7
NCBI Official Full Name	3-mercaptopyruvate sulfurtransferase isoform 2
NCBI Official Synonym Full Names	mercaptopyruvate sulfurtransferase
NCBI Official Symbol	MPST
NCBI Official Synonym Symbols	MST; TST2; TUM1
NCBI Protein Information	3-mercaptopyruvate sulfurtransferase; human liver rhodanese; tRNA thiouridin modification protein 1
UniProt Protein Name	3-mercaptopyruvate sulfurtransferase
UniProt Gene Name	MPST
UniProt Synonym Gene Names	TST2; MST
UniProt Entry Name	THTM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/mpst-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/127241>