# abcam

### Product datasheet

## Recombinant Human MTH1 protein ab99390

2 References 1 Image

**Description** 

Product name Recombinant Human MTH1 protein

Purity > 95 % SDS-PAGE.

ab99390 is purified using conventional chromatography techniques.

Expression system Escherichia coli

Accession P36639

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

Sequence MGSSHHHHHHSSGLVPRGSHMGASRLYTLVLVLQPQRV

LLGMKKRGFGAG

RWNGFGGKVQEGETIEDGARRELQEESGLTVDALHKVG

QIVFEFVGEPEL

MDVHVFCTDSIQGTPVESDEMRPCWFQLDQIPFKDMWP DDSYWFPLLLQK KKFHGYFKFQGQDTILDYTLREVDTV

Predicted molecular weight 20 kDa including tags

Amino acids 1 to 156

Tags His tag N-Terminus

**Specifications** 

Our Abpromise guarantee covers the use of ab99390 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Mass Spectrometry

Mass spectrometry MALDI-TOF

Form Liquid

**Preparation and Storage** 

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

1

cycles.

pH: 8.00

Constituents: 0.0308% DTT, 0.316% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

#### **General Info**

Function Antimutagenic. Acts as a sanitizing enzyme for oxidized nucleotide pools, thus suppressing cell

dysfunction and death induced by oxidative stress. Hydrolyzes 8-oxo-dGTP, 8-oxo-dATP and 2-OH-dATP, thus preventing misincorporation of oxidized purine nucleoside triphosphates into DNA and subsequently preventing A:T to C:G and G:C to T:A transversions. Able to hydrolyze also the corresponding ribonucleotides, 2-OH-ATP, 8-oxo-GTP and 8-oxo-ATP. Does not play a role in U8

snoRNA decapping activity. Binds U8 snoRNA.

Tissue specificity Widely expressed with highest expression in thymus, testis, embryo and proliferating blood

lymphocytes.

**Sequence similarities** Belongs to the Nudix hydrolase family.

Contains 1 nudix hydrolase domain.

**Developmental stage** In peripheral blood lymphocytes, expressed at much higher levels in proliferating cells than in

resting cells.

Post-translational

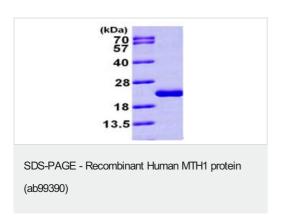
modifications

The N-terminus is blocked.

Cellular localization Cytoplasm. Mitochondrion matrix and Cytoplasm. Mitochondrion matrix. Nucleus. Mostly present

in cytoplasm. Variant Met-124 has decreased efficiency in translocation to mitochondria.

#### **Images**



15% SDS-PAGE analysis of 3µg ab99390.

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