

# MTH1 Rabbit mAb

Catalog # AP78192

## Product Information

Application	WB, IHC-P, IF, FC, ICC, IP
Primary Accession	<a href="#">P36639</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human MTH1
Purification	Affinity Purified
Calculated MW	17952

## Additional Information

Gene ID	4521
Other Names	NUDT1
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A IP~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

Name	NUDT1
Synonyms	MTH1 {ECO:0000303   PubMed:7713500}
Function	Oxidized purine nucleoside triphosphate hydrolase which is a prominent sanitizer of the oxidized nucleotide pool (PubMed: <a href="#">10608900</a> , PubMed: <a href="#">12857738</a> , PubMed: <a href="#">22556419</a> , PubMed: <a href="#">24695224</a> , PubMed: <a href="#">24695225</a> , PubMed: <a href="#">26238318</a> , PubMed: <a href="#">28679043</a> , PubMed: <a href="#">7713500</a> , PubMed: <a href="#">8226881</a> ). Catalyzes the hydrolysis of 2-oxo-dATP (2-hydroxy-dATP) into 2-oxo-dAMP (PubMed: <a href="#">10373420</a> ). Also has a significant hydrolase activity toward 2- oxo-ATP, 8-oxo-dGTP and 8-oxo-dATP (PubMed: <a href="#">10373420</a> , PubMed: <a href="#">11139615</a> ). Through the hydrolysis of oxidized purine nucleoside triphosphates, prevents their incorporation into DNA and the subsequent transversions A:T to C:G and G:C to T:A (PubMed: <a href="#">10373420</a> , PubMed: <a href="#">10608900</a> , PubMed: <a href="#">11756418</a> , PubMed: <a href="#">12857738</a> ,

PubMed:[16607562](#), PubMed:[24695224](#), PubMed:[24695225](#), PubMed:[26999531](#), PubMed:[28035004](#), PubMed:[8226881](#)). Also catalyzes the hydrolysis of methylated purine nucleoside triphosphate preventing their integration into DNA (PubMed:[30304478](#), PubMed:[32144205](#)). Through this antimutagenic activity protects cells from oxidative stress (PubMed:[10608900](#), PubMed:[12857738](#), PubMed:[24695224](#), PubMed:[24695225](#), PubMed:[30304478](#), PubMed:[32144205](#), PubMed:[7713500](#), PubMed:[8226881](#)).

### Cellular Location

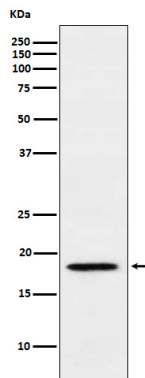
[Isoform p18]: Cytoplasm, cytosol. Mitochondrion matrix. Nucleus.  
Note=Mostly present in cytosol (PubMed:7782328). A minor proportion is mitochondrial (PubMed:7782328) A very small amount of the protein is associated with nuclei (PubMed:7782328).

### Tissue Location

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

## Images

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