

For Research Use Only

# MTH1 Monoclonal antibody

Catalog Number: 67443-1-Ig **1 Publications**



## Basic Information

<b>Catalog Number:</b> 67443-1-Ig	<b>GenBank Accession Number:</b> BC014618	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 2000 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 4521	<b>CloneNo.:</b> 2D7G4
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P36639	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:2000-1:8000
<b>Isotype:</b> IgG1	<b>Full Name:</b> nudix (nucleoside diphosphate linked moiety X)-type motif 1	
<b>Immunogen Catalog Number:</b> AG9802	<b>Calculated MW:</b> 179aa,20 kDa; 197aa,23 kDa	
	<b>Observed MW:</b> 19 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB	<b>WB :</b> HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells
<b>Species Specificity:</b> human, mouse	<b>IHC :</b> human renal cell carcinoma tissue, mouse testis tissue, human colon cancer tissue, human lung cancer tissue
<b>Cited Species:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

MTH1, also known as NUDT1 or 8-Oxo-dGTPase, is an important repair enzyme that prevents oxidative stress-induced DNA damage through hydrolyzing mutagenic 8-oxo-dGTP into 8-oxo-dGMP. MTH1 is expressed in postmitotic neurons as well as in proliferative tissues, and it is localized both in the mitochondria and nucleus. MTH1 might be a useful marker of oxidative stress and its level increased upon oxidative stress. Increased expression of MTH1 were also found in various cancer tissues and neurodegenerative diseases.

## Notable Publications

Author	Pubmed ID	Journal	Application
Nicholas C K Valerie	39643609	Nat Commun	WB

## Storage

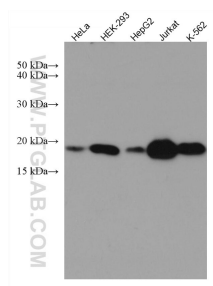
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

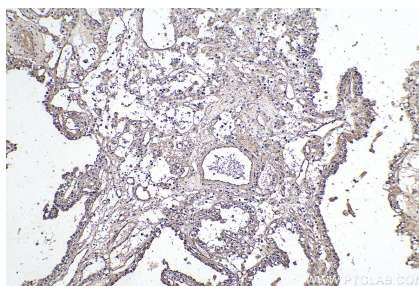
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

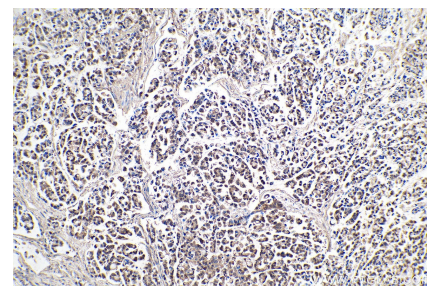
## Selected Validation Data



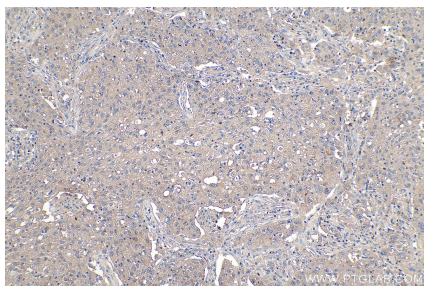
Various lysates were subjected to SDS PAGE followed by western blot with 67443-1-Ig (MTH1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 67443-1-Ig (MTH1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 67443-1-Ig (MTH1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 67443-1-Ig (MTH1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).