For Research Use Only

MTH1 Monoclonal antibody

Catalog Number:67443-1-Ig 1 Publications

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Basic Information

Catalog Number:
67443-1-Ig

Size:
150ul , Concentration: 2000 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG9802

GenBank Accession Number:
BC014618

GeneID (NCBI):
4521

UNIPROT ID:
P36639

Full Name:
nudix (nucleoside diphosphate linked moiety X)-type motif 1

Calculated MW:
179aa,20 kDa; 197aa,23 kDa

Observed MW:
19 kDa

Purification Method:
Protein G purification

CloneNo.:
2D7G4

Recommended Dilutions:
WB: 1:2000-1:10000
IHC: 1:2000-1:8000
IF/ICC: 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse

Cited Species:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells

IHC : human renal cell carcinoma tissue, mouse testis tissue, human colon cancer tissue, human lung cancer tissue

IF/ICC : HeLa cells,

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

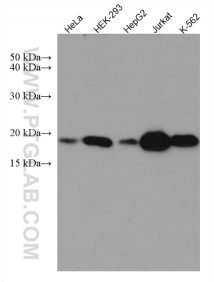
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

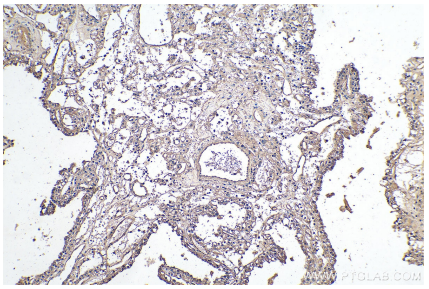
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

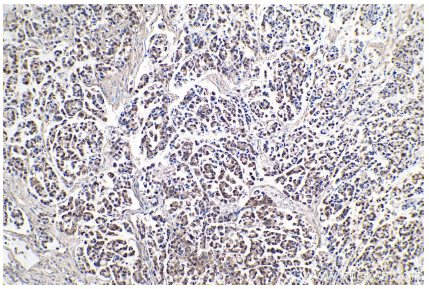
Selected Validation Data



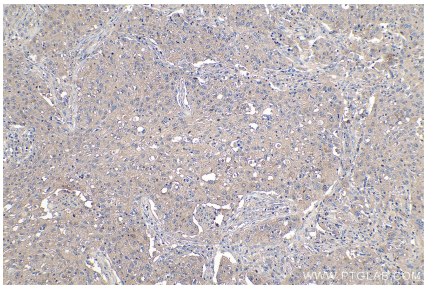
Various lysates were subjected to SDS PAGE followed by western blot with 67443-1-Ig (MTH1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



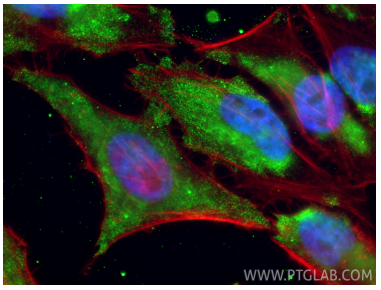
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 67443-1-Ig (MTH1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MTH1 antibody (67443-1-Ig, Clone: 2D7G4) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).