## For Research Use Only

## MTH1 Polyclonal antibody

Catalog Number: 16705-1-AP

Featured Product

**3 Publications** 



**Basic Information** 

**Applications** 

Catalog Number: 16705-1-AP

Size:

150ul, Concentration: 133 µg/ml by Bradford method using BSA as the

standard:

Rabbit

Isotype:

IgG Immunogen Catalog Number:

AG10103

GenBank Accession Number:

BC014618

GeneID (NCBI):

4521

nudix (nucleoside diphosphate linked  $^{
m IF}$  1:10-1:100

179aa,20 kDa; 197aa,23 kDa

moiety X)-type motif 1

Calculated MW:

Observed MW:

18-24 kDa

**Tested Applications:** IF THE WRIFTISA

**Cited Applications:** 

WB

Species Specificity: human, mouse, rat **Cited Species:** 

human, mouse

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: HepG2 cells, HEK-293 cells, PC-3 cells

IHC: human lung cancer tissue, mouse brain tissue

**Purification Method:** 

WB 1:200-1:1000

IHC 1:2000-1:8000

Antigen affinity purification

Recommended Dilutions:

IF: PC-3 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
Ya Gao	29221173	Oncotarget	WB
Xiang Wang	35395477	Colloids Surf B Biointerfaces	WB
Zi-Yi Yang	38042236	Photodiagnosis Photodyn Ther	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

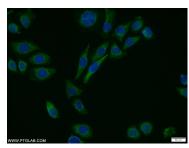
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

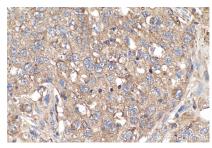
## Selected Validation Data



HepG2 cells were subjected to SDS PAGE followed by western blot with 16705-1-AP (MTH1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of PC-3 cells using 16705-1-AP (MTH1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 16705-1-AP (MTH1 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).