

For Research Use Only

# MTHFD1 Monoclonal antibody

Catalog Number: 67670-1-Ig

Featured Product

2 Publications



## Basic Information

Catalog Number:

67670-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop and 416 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG24553

GenBank Accession Number:

BC009806

GeneID (NCBI):

4522

UNIPROT ID:

P11586

Full Name:

methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase

Calculated MW:

101 kDa

Observed MW:

101 kDa

Purification Method:

Protein G purification

CloneNo.:

2B1G3

Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:250-1:1000

IF/ICC 1:200-1:800

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

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 : U2OS cells, A431 cells, A549 cells, HeLa cells, HEK-293 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells

IHC : human colon cancer tissue, human liver cancer tissue

IF/ICC : HEK-293 cells,

## Background Information

MTHFD1 is a trifunctional enzyme involved in the pathway tetrahydrofolate interconversion, which is part of One-carbon metabolism. MTHFD1 is associated with HCC and CRC progression. It has been reported that MTHFD-deficient patient fibroblasts exhibit enriched MTHFD1 in the nucleus which is critical for de novo dTMP synthesis. (PMID: 31133746, 30997850, 31421459, 25548164)

## Notable Publications

Author	Pubmed ID	Journal	Application
Changhong Yang	33718182	Front Oncol	WB
Yanjie Gao	37307917	J Biol Chem	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

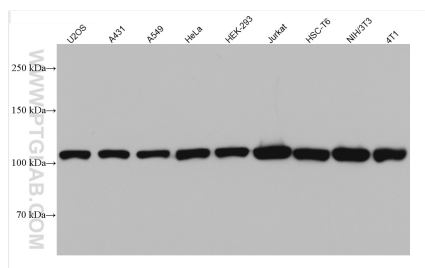
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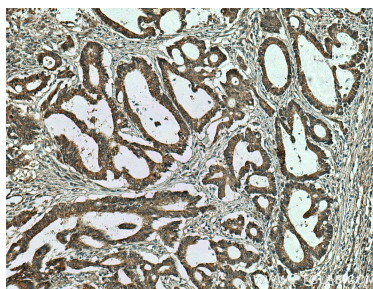
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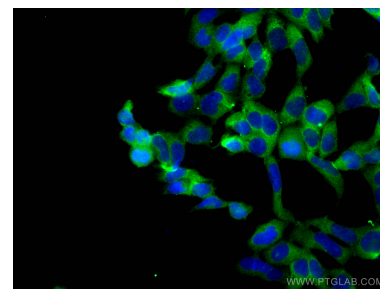
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67670-1-Ig (MTHFD1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 67670-1-Ig (MTHFD1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using MTHFD1 antibody (67670-1-Ig, Clone: 2B1G3 ) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).