

## MTHFD1 Monoclonal antibody

Catalog Number: 67670-1-Ig

Featured Product

2 Publications

## Basic Information

Catalog Number:

67670-1-Ig

Size:

1000 µg/ml

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, IF/ICC, IHC, 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

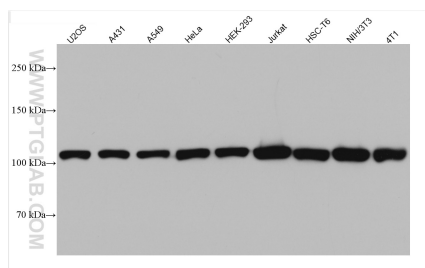
For technical support and original validation data for this product please contact:

T: 4006900926

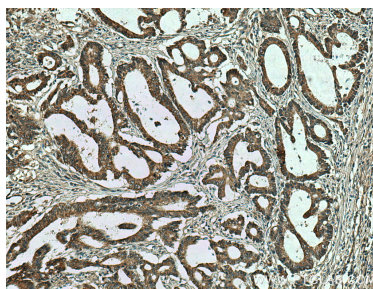
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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 Group brand and is not available to purchase from any  
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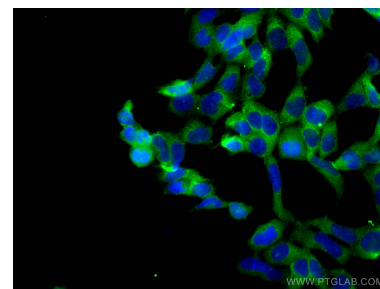
## Selected Validation Data



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).