For Research Use Only

MTHFD1 Monoclonal antibody

Catalog Number:67670-1-lg 2 Publications



Purification Method:

Protein G purification

Recommended Dilutions:

WB 1:2000-1:10000 IHC 1:250-1:1000

IF 1:200-1:800

CloneNo.:

2B1G3

Basic Information

Catalog Number: 67670-1-lg 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

Applications

Tested Applications: IF/ICC, IHC, WB, 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: HEK-293 cells,

Background Information

MTHFD1 is a trifunctional enzyme involved in the pathway tetrahydrofolate interconversion, which is part of Onecarbon metabolism. MTHFD1 is associated with HCC and CRC progression. It has been reported that MTHFDdeficient 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

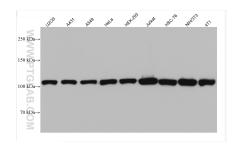
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

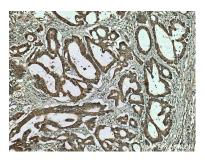
W: ptgcn.co

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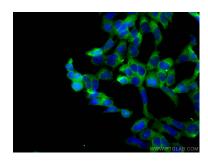
Selected Validation Data



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



Immunohistochemical analysis of paraffinembedded 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 (67670-1-1g, Clone: 2B1G3) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).