

For Research Use Only

MTHFD1 Polyclonal antibody

Catalog Number: 10794-1-AP

Featured Product

6 Publications



Basic Information

Catalog Number:

10794-1-AP

Size:

150UL, Concentration: 450 µg/ml by Nanodrop and 267 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1225

GenBank Accession Number:

BC009806

GeneID (NCBI):

4522

Full Name:

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

Calculated MW:

101 kDa

Observed MW:

101 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000
IP 0.5-4.0 µg for IP and 1:500-1:1000 for WB
IHC 1:50-1:500

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

IHC, WB

Species Specificity:

human, mouse

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: HEK-293 cells, human brain tissue, HuH-7 cells, K-562 cells, mouse kidney tissue

IP: mouse kidney tissue,

IHC: human liver cancer tissue, human colon cancer tissue

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 |
|------------------|-----------|--------------|-------------|
| Costas Koufaris | 30275950 | Cancer Metab | WB |
| Elena Piskounova | 26466563 | Nature | WB |
| Lei Bao | 31575956 | Sci Rep | 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

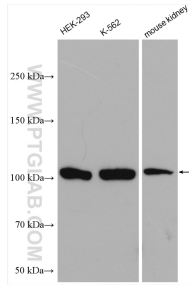
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

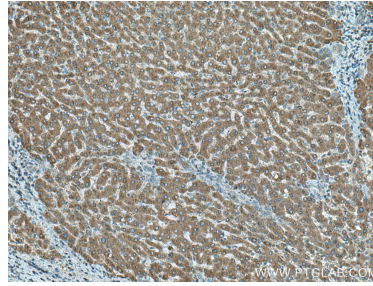
E: proteintech@ptglab.com
W: ptglab.com

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

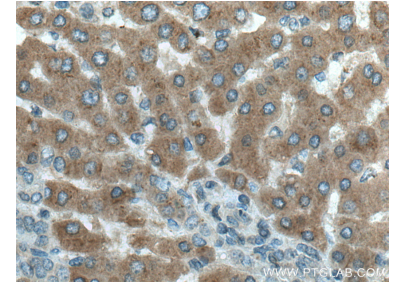
Selected Validation Data



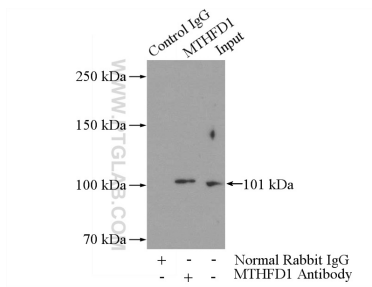
Various lysates were subjected to SDS PAGE followed by western blot with 10794-1-AP (MTHFD1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10794-1-AP (MTHFD1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10794-1-AP (MTHFD1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-MTHFD1 (IP:10794-1-AP, 5ug; Detection:10794-1-AP 1:600) with mouse kidney tissue lysate 4000ug.