

For Research Use Only

MTHFD1 Polyclonal antibody

Catalog Number: 10794-1-AP

Featured Product

15 Publications



Basic Information

Catalog Number:

10794-1-AP

Size:

450 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1225

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:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:2000

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IP

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, HuH-7 cells, human brain tissue, K-562 cells, mouse kidney tissue, MCF-7 cells

IP : mouse kidney tissue,

IHC : human liver cancer tissue, human colon 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
Costas Koufaris	30275950	Cancer Metab	WB
Danielle E Anderson	34544865	Proc Natl Acad Sci U S A	WB
Li Cui	34533844	J Pineal Res	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:

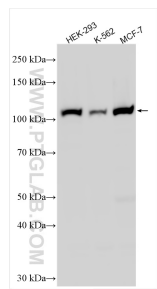
T: 4006900926

E: Proteintech-CN@ptglab.com

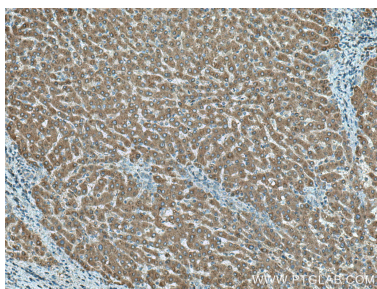
W: ptgcn.com

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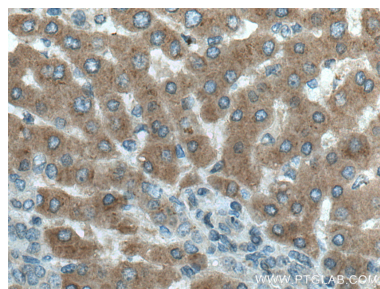
Selected Validation Data



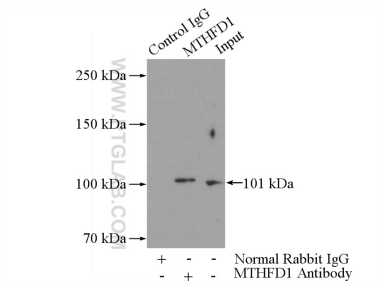
Various lysates were subjected to SDS PAGE followed by western blot with 10794-1-AP (MTHFD1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



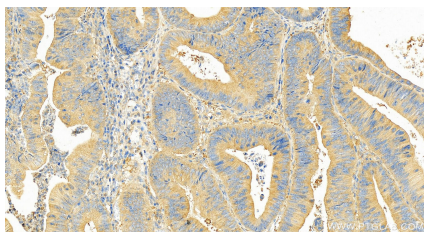
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10794-1-AP (MTHFD1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



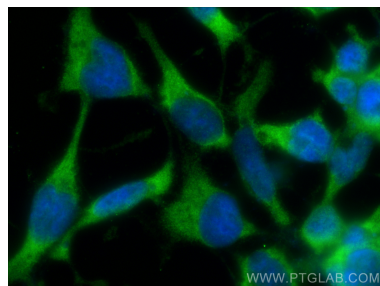
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10794-1-AP (MTHFD1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10794-1-AP (MTHFD1 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using MTHFD1 antibody (10794-1-AP) at dilution of 1:400 and Multi-rAb Coralite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).