

For Research Use Only

MTHFD1 Polyclonal antibody

Catalog Number: 10794-1-AP

Featured Product

12 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:
methylentetrahydrofolate 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 ug for 1.0-3.0 mg of total protein lysate
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
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

*** 20ul sizes contain 0.1% BSA

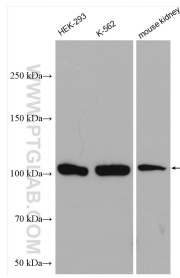
For technical support and original validation data for this product please contact:

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

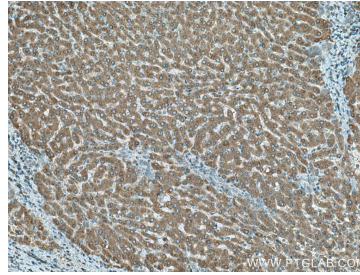
E: proteintech@ptglab.com
W: ptglab.com

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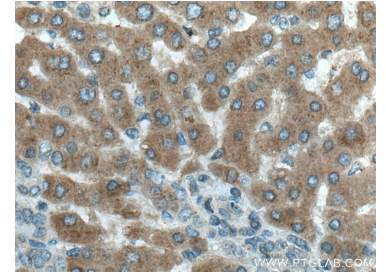
Selected Validation Data



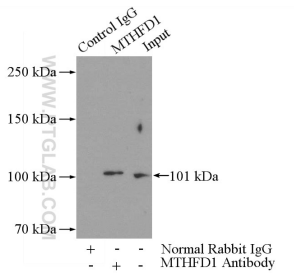
Various lysates were subjected to SDS PAGE followed by western blot with 10794-1-AP (MTHFD1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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.