

For Research Use Only

MTHFD1L Polyclonal antibody

Catalog Number: 16113-1-AP

Featured Product

18 Publications



Basic Information

| | | |
|---|--|--|
| Catalog Number: 16113-1-AP | GenBank Accession Number: BC017477 | Purification Method: Antigen affinity purification |
| Size: 150ul, Concentration: 500 µg/ml by Nanodrop and 253 µg/ml by Bradford method using BSA as the standard; | GeneID (NCBI): 25902 | Recommended Dilutions: WB 1:2000-1:10000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate |
| Source: Rabbit | Full Name: methylentetrahydrofolate dehydrogenase (NADP+ dependent) 1-like | IHC 1:50-1:500 IF 1:50-1:500 |
| Isotype: IgG | Calculated MW: 978 aa, 106 kDa | |
| Immunogen Catalog Number: AG9036 | Observed MW: 106 kDa | |

Applications

Tested Applications:
IF, IHC, IP, WB, ELISA

Cited Applications:
IHC, WB

Species Specificity:
human, mouse, rat

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, COLO 320 cells, mouse ovary tissue, HeLa cells, HepG2 cells

IP: HeLa cells,

IHC: human liver cancer tissue,

IF: HepG2 cells,

Background Information

MTHFD1L (Monofunctional C1-tetrahydrofolate synthase, mitochondrial) is also named as FTHFSDC1 (Formyltetrahydrofolate synthetase). MTHFD1L enzyme is present in mitochondria from normal embryonic tissues and embryonic fibroblast cell lines, and embryonic mitochondria possess the ability to synthesize formate from glycine. It catalyzes the final step in the mitochondrial conversion of 1-C units to formate in embryos. Moreover, MTHFD1L levels were substantially higher in embryonic mitochondria than in adult liver mitochondria and embryonic mitochondria exhibited greater formate production (PMID:19948730). It has 2 isoforms produced by alternative splicing.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-----------------|-----------|--------------|-------------|
| Costas Koufaris | 30275950 | Cancer Metab | WB |
| Li Cui | 34533844 | J Pineal Res | WB, IHC |
| Saara Forsström | 31523008 | Cell Metab | 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

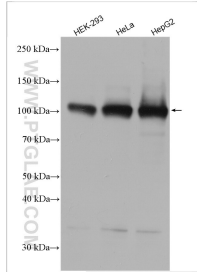
For technical support and original validation data for this product please contact:

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

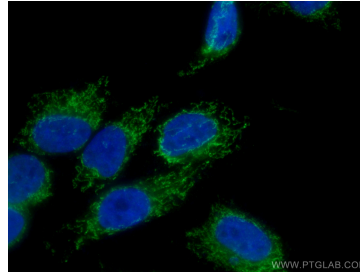
E: proteintech@ptglab.com
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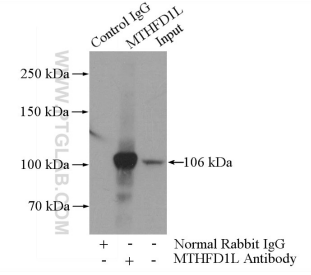
Selected Validation Data



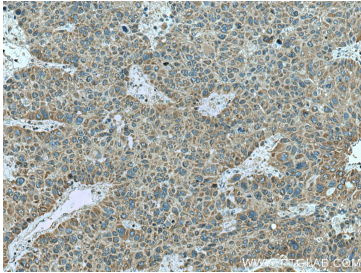
Various lysates were subjected to SDS PAGE followed by western blot with 16113-1-AP (MTHFD1L antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



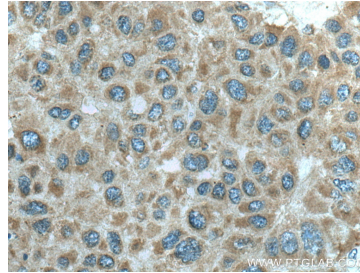
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 16113-1-AP (MTHFD1L antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP Result of anti-MTHFD1L (IP:16113-1-AP, 4ug; Detection:16113-1-AP 1:1000) with HeLa cells lysate 2000ug.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16113-1-AP (MTHFD1L 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 16113-1-AP (MTHFD1L antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).