For Research Use Only

MTHFD1L Polyclonal antibody

Catalog Number: 16113-1-AP

Featured Product

19 Publications



Basic Information

Catalog Number: GenBank Accession Number: 16113-1-AP BC017477 GeneID (NCBI): Size: 500 μg/ml 25902 **UNIPROT ID:** Source: Rabbit Q6UB35 Full Name: Isotype:

methyl enete trahydro fol ate

dehydrogenase (NADP+ dependent) 1-Immunogen Catalog Number:

AG9036

Calculated MW: 978 aa, 106 kDa Observed MW: 106 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, IP, ELISA **Cited Applications:**

WB. IHC

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

Purification Method:

WB 1:2000-1:10000

protein lysate

IHC 1:50-1:500

IF/ICC 1:50-1:500

Antigen affinity purification

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

Recommended Dilutions:

tissue, HeLa cells, HepG2 cells

IP: HeLa cells,

IHC: human liver cancer tissue,

IF/ICC: 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 $synthesize formate from glycine. It catalyzes the final step in the mitochondrial conversion of {\it 1-C} units to formate from {\it 2-C} units to formate from {\it 3-C} units to formate fro$ 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.

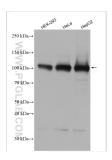
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact: T: 4006900926

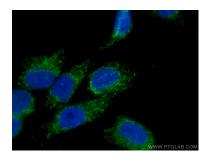
E: Proteintech-CN@ptglab.com W: ptgcn.com

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

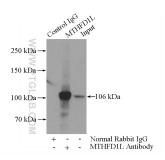
Selected Validation Data



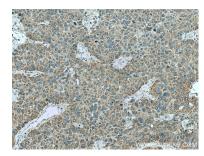
Various lysates were subjected to SDS PAGE followed by western blot with 16113-1-AP (MTHFD1L antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



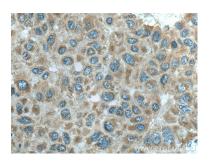
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 16113-1-AP (MTHFD1L antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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).