

For Research Use Only

# MTHFD1L Polyclonal antibody

Catalog Number: 16113-1-AP

Featured Product

19 Publications



## Basic Information

<b>Catalog Number:</b> 16113-1-AP	<b>GenBank Accession Number:</b> BC017477	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 500 ug/ml by Nanodrop and 253 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 25902	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:50-1:500 IF/ICC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q6UB35	
<b>Isotype:</b> IgG	<b>Full Name:</b> methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	
<b>Immunogen Catalog Number:</b> AG9036	<b>Calculated MW:</b> 978 aa, 106 kDa	
	<b>Observed MW:</b> 106 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IP, ELISA	<b>Positive Controls:</b> WB : HEK-293 cells, COLO 320 cells, mouse ovary tissue, HeLa cells, HepG2 cells
<b>Cited Applications:</b> WB, IHC	<b>IP :</b> HeLa cells,
<b>Species Specificity:</b> human, mouse, rat	<b>IHC :</b> human liver cancer tissue,
<b>Cited Species:</b> human, mouse	<b>IF/ICC :</b> HepG2 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## 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

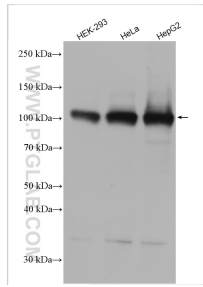
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

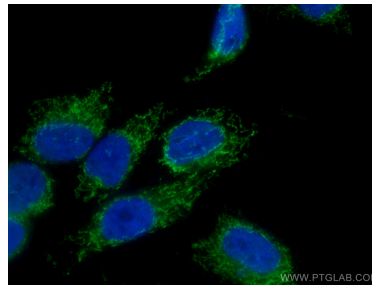
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

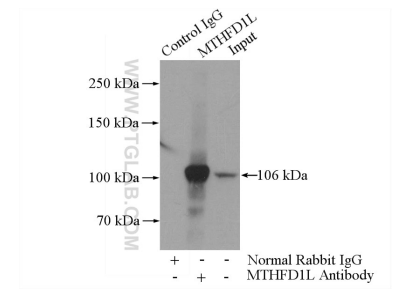
## Selected Validation Data



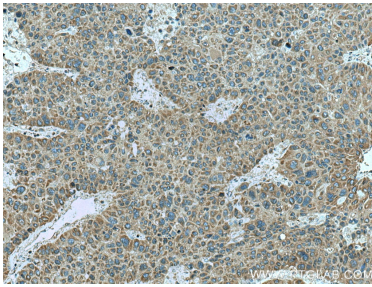
Various lysates were subjected to SDS PAGE followed by western blot with 16113-1-AP (MTHFD1L antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



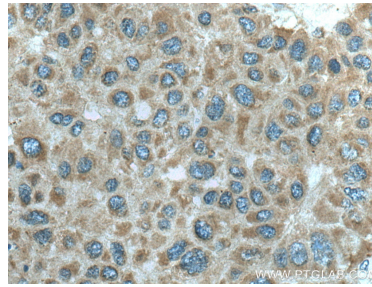
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 16113-1-AP (MTHFD1L antibody) at dilution of 1:100 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).



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



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).