For Research Use Only

MTHFD1L Monoclonal antibody

Catalog Number: 68321-1-Ig



Basic Information

Catalog Number: GenBank Accession Number: 68321-1-lg BC017477

 Size:
 GeneID (NCBI):
 CloneNo.:

 1000 μ g/ml
 25902
 1G1F2

 Source:
 UNIPROT ID:
 Recommended Dilutions:

 Mouse
 Q6UB35
 WB 1:5000-1:50000

 Isotype:
 Full Name:
 IHC 1:250-1:1000

IgG2b methylenetetrahydrofolate

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

AG9061

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

Applications

Tested Applications: WB, IHC, FC (Intra), ELISA Species Specificity:

human, mouse, rat, rabbit

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: U2OS cells, rabbit testis tissue, LNCaP cells, HeLa cells, HEK-293 cells, HepG2 cells, rat testis tissue

Purification Method:

Protein A purification

IHC: mouse liver tissue,

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.

Storage

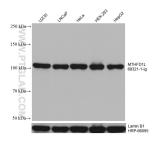
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

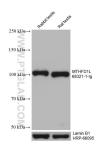
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

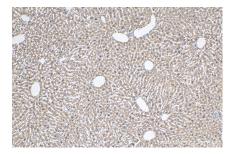
Selected Validation Data



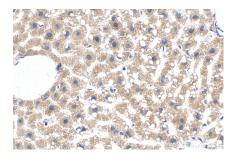
Various lysates were subjected to SDS PAGE followed by western blot with 68321-1-1g (MTHFD1L antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



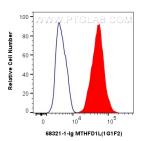
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Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 68321-1-Ig (MTHFD1L antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 68321-1-Ig (MTHFD1L antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HepG2 cells were intracellularly stained with 0.4 ug MTHFD1L Monoclonal antibody (68321-1-lg, Clone:1G1F2) and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1) (red), or 0.4 ug Mouse IgG2b isotype control Mouse McAb (66360-3-lg, Clone: 1188C4) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).