

For Research Use Only

MTHFD1L Monoclonal antibody, PBS Only (Capture)



Catalog Number: 68321-1-PBS

Basic Information

Catalog Number: 68321-1-PBS	GenBank Accession Number: BC017477	Purification Method: Protein A purification
Size: 100ug , Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 25902	CloneNo.: 1G1F2
Source: Mouse	UNIPROT ID: Q6UB35	
Isotype: IgG2b	Full Name: methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	
Immunogen Catalog Number: AG9061	Calculated MW: 978 aa, 106 kDa	
	Observed MW: 106 kDa	

Applications

Tested Applications:
WB, IHC, Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat, rabbit

Product Information

68321-1-PBS targets MTHFD1L as part of a matched antibody pair:

MP50271-2: 68321-1-PBS capture and 68321-3-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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

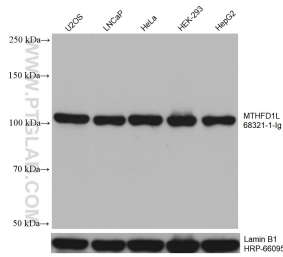
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

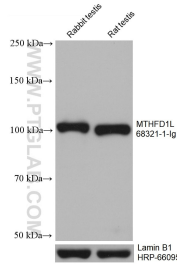
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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

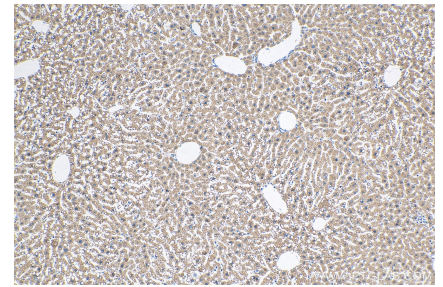
Selected Validation Data



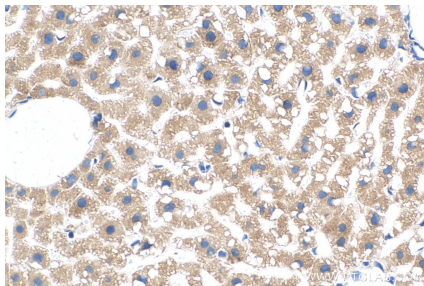
Various lysates were subjected to SDS PAGE followed by western blot with 68321-1-Ig (MTHFD1L antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control. This data was developed using the same antibody clone with 68321-1-PBS in a different storage buffer formulation.



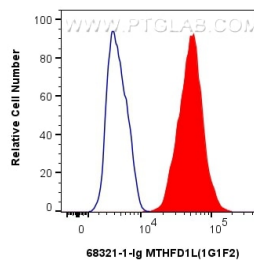
Various lysates were subjected to SDS PAGE followed by western blot with 68321-1-Ig (MTHFD1L antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control. This data was developed using the same antibody clone with 68321-1-PBS in a different storage buffer formulation.



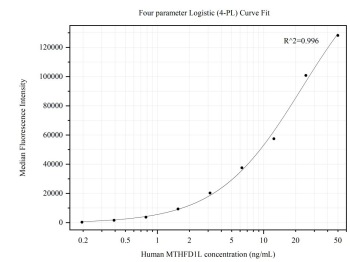
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 68321-1-Ig (MTHFD1L antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68321-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded 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). This data was developed using the same antibody clone with 68321-1-PBS in a different storage buffer formulation.



1x10⁶ HepG2 cells were intracellularly stained with 0.4 ug MTHFD1L Monoclonal antibody (68321-1-Ig, 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-Ig, Clone: 11B8C4) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 68321-1-PBS in a



Cytometric bead array standard curve of MP50271-2, MTHFD1L Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68321-1-PBS. Detection antibody: 68321-3-PBS. Standard:Ag9061. Range: 0.195-50 ng/mL