

For Research Use Only

MTHFR Monoclonal antibody, PBS Only

Catalog Number: 66612-1-PBS



Basic Information

Catalog Number: 66612-1-PBS	GenBank Accession Number: BC053509	Purification Method: Protein A purification
Size: 1mg/ml	GeneID (NCBI): 4524	CloneNo.: 1F7A3
Source: Mouse	UNIPROT ID: P42898	
Isotype: IgG2b	Full Name: 5,10-methylenetetrahydrofolate reductase (NADPH)	
Immunogen Catalog Number: AG14970	Calculated MW: 656 aa, 75 kDa	
	Observed MW: 70 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, Indirect ELISA

Species Specificity:
human

Background Information

5,10-Methylenetetrahydrofolate reductase (MTHFR) is a crucial enzyme in the folate metabolic pathway with a key role in generating methyl groups. MTHFR reduces 5,10-methylenetetrahydrofolate (5,10-methyleneTHF) to 5-methylTHF, the primary carbon donor for methionine production from homocysteine. In humans and mice studies, mutations and polymorphisms in MTHFR are associated with impaired spermatogenesis and male infertility. It has been reported that MTHFR is highly phosphorylated under unperturbed conditions and T34 is the priming phosphorylation site. MTHFR gene has two promoters and isoform (70 kDa and 77 kDa). Although the major form of MTHFR is 77kDa in most tissues, a second isoform of 70kDa was observed after western blotting of human fetal liver and porcine liver. (PMID: 24769206, PMID: 34128976, PMID: 18615588)

Storage

Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS Only

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

T: 4006900926

E: Proteintech-CN@ptglab.com

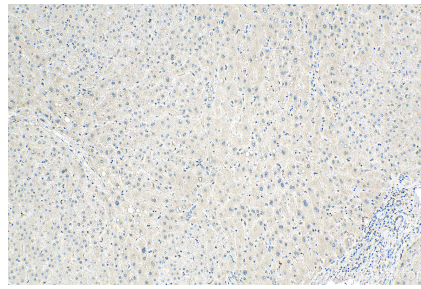
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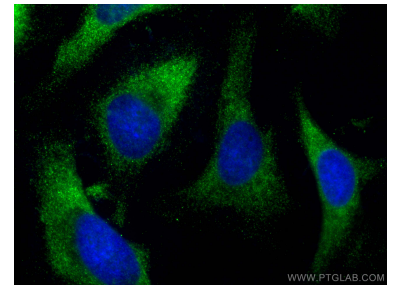
Selected Validation Data



LNCaP cells were subjected to SDS PAGE followed by western blot with 66612-1-Ig (MTHFR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66612-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 66612-1-Ig (MTHFR antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66612-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using MTHFR antibody (66612-1-Ig, Clone: 1F7A3) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 66612-1-PBS in a different storage buffer formulation.