

For Research Use Only

MTHFD2 Monoclonal antibody

Catalog Number: 68524-1-Ig



Basic Information

Catalog Number: 68524-1-Ig	GenBank Accession Number: BC017054	Purification Method: Protein A purification
Size: 150ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 10797	CloneNo.: 1B4B6
Source: Mouse	UNIPROT ID: P13995	Recommended Dilutions: WB 1:5000-1:20000 IHC 1:250-1:1000
Isotype: IgG2a	Full Name: methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methenyltetrahydrofolate cyclohydrolase	
Immunogen Catalog Number: AG33605	Calculated MW: 350 aa, 38 kDa	
	Observed MW: 33-38 kDa	

Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

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 : MCF-7 cells, LNCaP cells, HCT 116 cells, HeLa cells, HepG2 cells, K-562 cells, U2OS cells

IHC : human lung cancer tissue, mouse kidney tissue

Background Information

Methylenetetrahydrofolate dehydrogenase 2 (MTHFD2) is a folate-coupled mitochondrial metabolic enzyme characterized by methylenetetrahydrofolate dehydrogenase and cyclohydrolase activity. It was demonstrated that suppression of MTHFD2 inhibits methylation reactions, decreases protein synthesis and disrupts redox homeostasis, which may ultimately result in significant changes in cellular metabolic phenotype. MTHFD2 is reported to be up-regulated in various tumours, such as lung adenocarcinoma (PMID: 34121323) and breast cancer (PMID: 34007312).

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

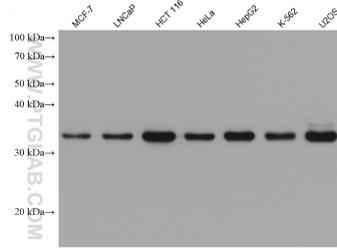
For technical support and original validation data for this product please contact:

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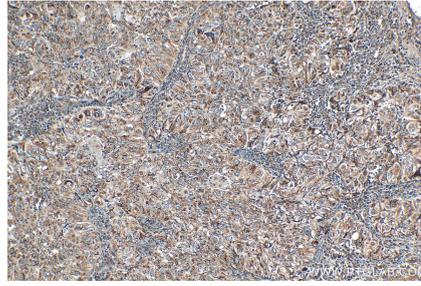
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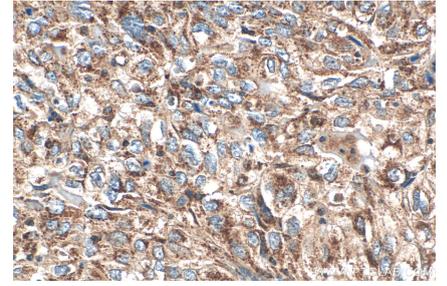
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68524-1-Ig (MTHFD2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 68524-1-Ig (MTHFD2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 68524-1-Ig (MTHFD2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).