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MTHFD2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant MTHFD2.
Catalog # AT2928a

Product Information

Application	WB, IHC
Primary Accession	P13995
Other Accession	BC001548
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a kappa
Clone Names	4G7-2G3
Calculated MW	37895

Additional Information

Gene ID	10797
Other Names	Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase, mitochondrial, NAD-dependent methylenetetrahydrofolate dehydrogenase, Methenyltetrahydrofolate cyclohydrolase, MTHFD2, NMDMC
Target/Specificity	MTHFD2 (AAH01548, 16 a.a. ~ 344 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MTHFD2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

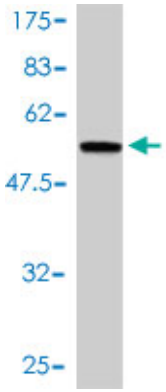
Background

This gene encodes a nuclear-encoded mitochondrial bifunctional enzyme with methylenetetrahydrofolate dehydrogenase and methenyltetrahydrofolate cyclohydrolase activities. The enzyme functions as a homodimer and is unique in its absolute requirement for magnesium and inorganic phosphate. Formation of the enzyme-magnesium complex allows binding of NAD. Alternative splicing results in two different transcripts, one protein-coding and the other not protein-coding. This gene has a pseudogene on chromosome 7.

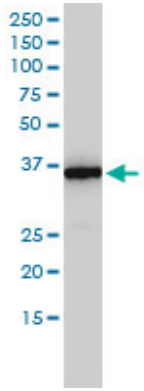
References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000.Genetic susceptibility to distinct bladder cancer subphenotypes. Guey LT, et al. Eur Urol, 2010 Feb. PMID 19692168.PTEN identified as important risk factor of chronic obstructive pulmonary disease. Hosgood HD 3rd, et al. Respir Med, 2009 Dec. PMID 19625176.118 SNPs of folate-related genes and risks of spina bifida and conotruncal heart defects. Shaw GM, et al. BMC Med Genet, 2009 Jun 3. PMID 19493349.

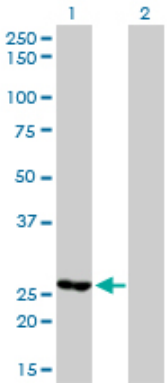
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (61.93 KDa) .

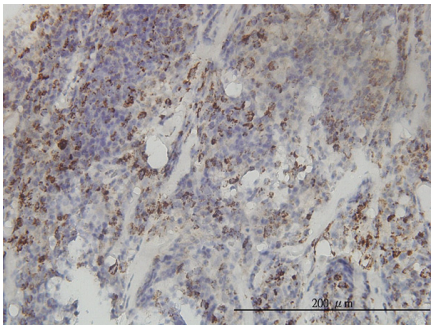


MTHFD2 monoclonal antibody (M01), clone 4G7-2G3 Western Blot analysis of MTHFD2 expression in HepG2 ((Cat # AT2928a)



Western Blot analysis of MTHFD2 expression in transfected 293T cell line by MTHFD2 monoclonal antibody (M01), clone 4G7-2G3.

Lane 1: MTHFD2 transfected lysate(26.8 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to MTHFD2 on formalin-fixed paraffin-embedded human lymphoma tissue. [antibody concentration 3 ug/ml]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.