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DHFR Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant DHFR.
Catalog # AT1758a

Product Information

Application	WB, IF, E
Primary Accession	P00374
Other Accession	BC003584
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2B10
Calculated MW	21453

Additional Information

Gene ID	1719
Other Names	Dihydrofolate reductase, DHFR
Target/Specificity	DHFR (AAH03584, 88 a.a. ~ 187 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
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	DHFR Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

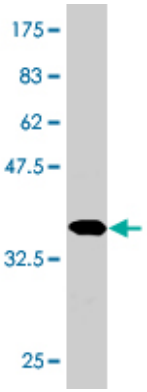
Dihydrofolate reductase converts dihydrofolate into tetrahydrofolate, a methyl group shuttle required for the de novo synthesis of purines, thymidylic acid, and certain amino acids. While the functional dihydrofolate reductase gene has been mapped to chromosome 5, multiple intronless processed pseudogenes or dihydrofolate reductase-like genes have been identified on separate chromosomes. Dihydrofolate reductase deficiency has been linked to megaloblastic anemia.

References

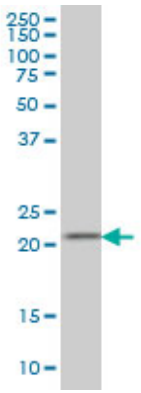
1.Influence of Reduced Folate Carrier and Dihydrofolate Reductase Genes on Methotrexate-Induced Cytotoxicity.Yoon SA, Choi JR, Kim JO, Shin JY, Zhang X, Kang JH.Cancer Res Treat. 2010 Sep;42(3):163-71.

Epub 2010 Sep 30.2.Telomere capping in non-dividing yeast cells requires Yku and Rap1.Vodenicharov MD, Laterreur N, Wellinger RJ.EMBO J. 2010 Jul 13. [Epub ahead of print]3.Anticancer drug encapsulated in inorganic lattice can overcome drug resistance.Choi SJ, Choi GE, Oh JM, Oh YJ, Park MC, Choy JH.J. Mater. Chem., 2010, 20, 9463-94694.Deficient BH4 production via de novo and salvage pathways regulates NO responses to cytokines in adult cardiac myocytes.Ionova IA, Vasquez-Vivar J, Whitsett J, Herrnreiter A, Medhora M, Cooley BC, Pieper GM.Am J Physiol Heart Circ Physiol. 2008 Nov;295(5):H2178-87. Epub 2008 Oct 3.

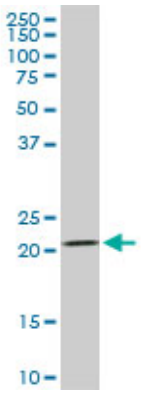
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



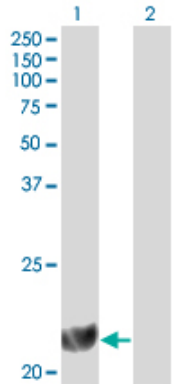
DHFR monoclonal antibody (M01), clone 2B10 Western Blot analysis of DHFR expression in HeLa ((Cat # AT1758a)

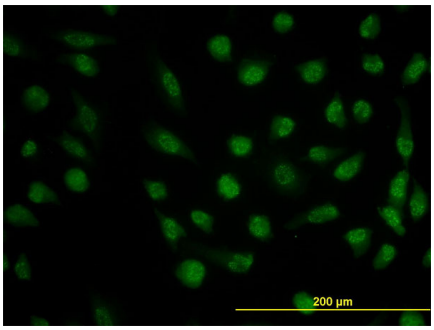


DHFR monoclonal antibody (M01), clone 2B10. Western Blot analysis of DHFR expression in PC-12 ((Cat # AT1758a)

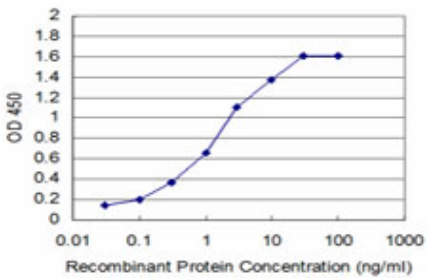
Western Blot analysis of DHFR expression in transfected 293T cell line by DHFR monoclonal antibody (M01), clone 2B10.

Lane 1: DHFR transfected lysate(21.5 KDa).
Lane 2: Non-transfected lysate.





Immunofluorescence of monoclonal antibody to DHFR on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged DHFR is approximately 0.1ng/ml as a capture antibody.

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