

## DHFR Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant DHFR.

Catalog # AT1758a

### Specification

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#### DHFR Antibody (monoclonal) (M01) - Product Information

Application	IF, WB, E
Primary Accession	<a href="#">P00374</a>
Other Accession	<a href="#">BC003584</a>
Reactivity	Human, Rat
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	21453

#### DHFR Antibody (monoclonal) (M01) - 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

#### 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.

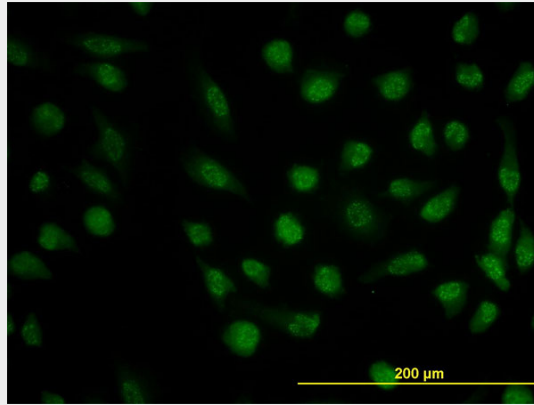
#### DHFR Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

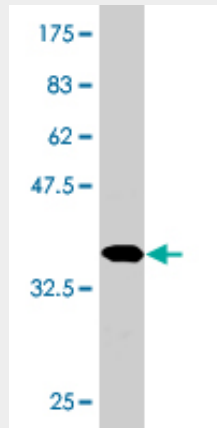
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

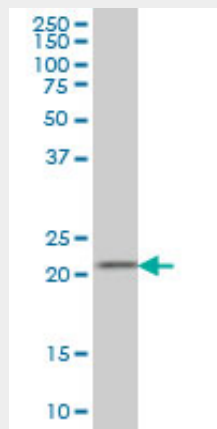
### DHFR Antibody (monoclonal) (M01) - Images



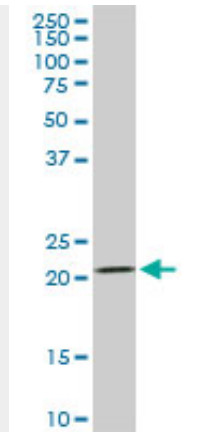
Immunofluorescence of monoclonal antibody to DHFR on HeLa cell. [antibody concentration 10 ug/ml]



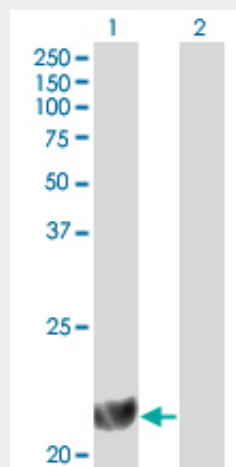
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



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

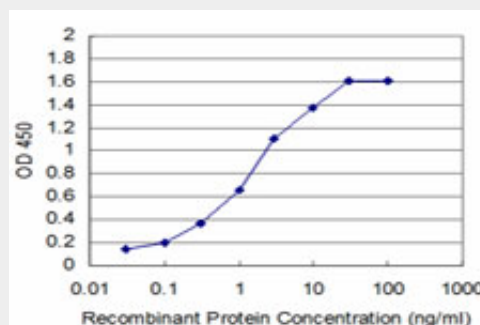


DHFR monoclonal antibody (M01), clone 2B10. Western Blot analysis of DHFR expression in PC-12 (Cat # AT1758a)



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.



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

### DHFR Antibody (monoclonal) (M01) - Background

Dihydrofolate reductase converts dihydrofolate into tetrahydrofolate, a methyl group shuttle required for the de novo synthesis of purines, thymidylc 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.

#### **DHFR Antibody (monoclonal) (M01) - 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, 9463-9469.

4. 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.