

Product Datasheet

Dihydrofolate Reductase/DHFR Antibody (2B10) H00001719-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Publications: 12

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/H00001719-M01

Updated 6/27/2023 v.20.1

**Earn rewards for product
reviews and publications.**

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/H00001719-M01

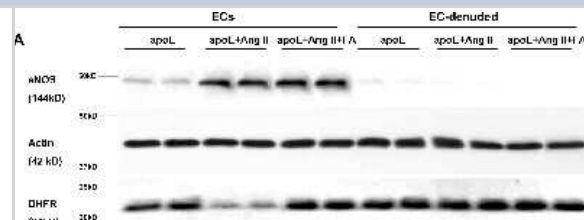


H00001719-M01**Dihydrofolate Reductase/DHFR Antibody (2B10)**

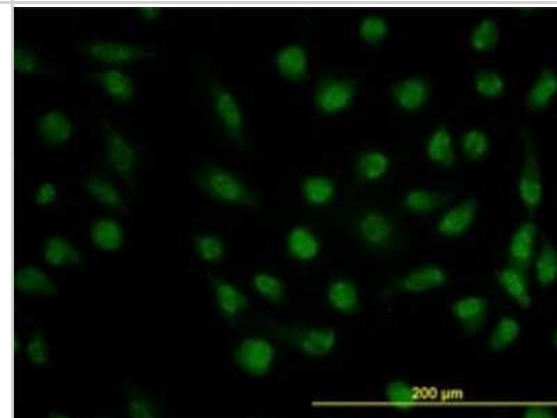
Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2B10
Preservative	No Preservative
Isotype	IgG2a Kappa
Purity	Protein A purified
Buffer	In 1x PBS, pH 7.4
Product Description	
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	1719
Gene Symbol	DHFR
Species	Human, Mouse, Rat, Yeast
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 24558445). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
Specificity/Sensitivity	DHFR (2B10)
Immunogen	DHFR (AAH03584, 88 a.a. ~ 187 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. HFLSRSLDDALKLTEQPPELANKVDMVWIVGGSSVYKEAMNHPGHLKLFVTRIM QDFESDTFFPEIDLEKYKLLPEYPGVLSDVQEEKGIKYKFEVYEKND
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/Immunofluorescence, Sandwich ELISA
Recommended Dilutions	Western Blot 1:500, ELISA, Immunocytochemistry/Immunofluorescence 1:10-1:2000, Sandwich ELISA 1:10-1:2000
Application Notes	Antibody reactivity against cell lysate and recombinant protein for WB. It has also been used for IF and ELISA.

Images

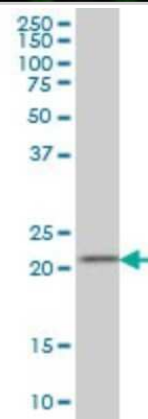
Western Blot: Dihydrofolate Reductase/DHFR Antibody (2B10) [H00001719-M01] - Folic acid treatment restores endothelial specific DHFR expression and activity in Ang II-infused apoE null mice. DHFR expression (A, n=?8-11) and activity (B, n=?5-7) measured from endothelial cells (ECs) and EC-denuded aortas isolated from apoE null mice after 4 weeks of infusion. Data show that DHFR expression and activity was restored in FA treated animals specifically in the endothelial cells. eNOS was stained to show that isolation/removal of ECs from the vessels was successful. * $p < 0.05$. Image collected and cropped by CiteAb from the following publication ([//dx.plos.org/10.1371/journal.pone.0088899](https://dx.plos.org/10.1371/journal.pone.0088899)) licensed under a CC-BY license.



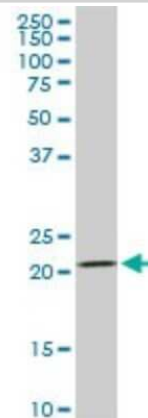
Immunocytochemistry/Immunofluorescence: Dihydrofolate Reductase/DHFR Antibody (2B10) [H00001719-M01] - Analysis of monoclonal antibody to DHFR on HeLa cell. Antibody concentration 10 ug/ml.



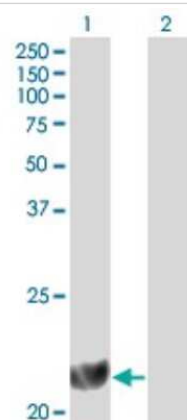
Western Blot: Dihydrofolate Reductase/DHFR Antibody (2B10) [H00001719-M01] - DHFR monoclonal antibody (M01), clone 2B10. Analysis of DHFR expression in HeLa.



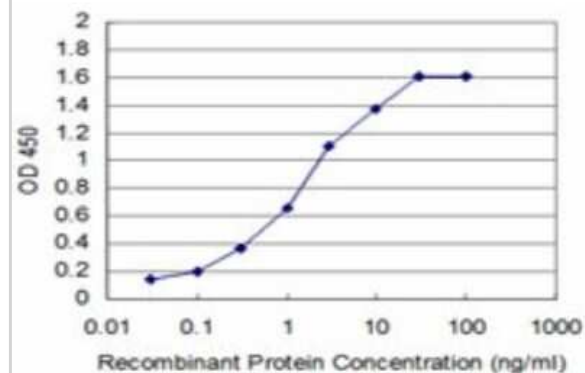
Western Blot: Dihydrofolate Reductase/DHFR Antibody (2B10) [H00001719-M01] - DHFR monoclonal antibody (M01), clone 2B10. Analysis of DHFR expression in PC-12.



Western Blot: Dihydrofolate Reductase/DHFR Antibody (2B10) [H00001719-M01] - 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.



Sandwich ELISA: Dihydrofolate Reductase/DHFR Antibody (2B10) [H00001719-M01] - Detection limit for recombinant GST tagged DHFR is approximately 0.1ng/ml as a capture antibody.



Publications

Li Q, Youn JY, Siu KL et al. Knockout of dihydrofolate reductase in mice induces hypertension and abdominal aortic aneurysm via mitochondrial dysfunction Redox Biology 2019-06-01 [PMID: 30954686] (WB)

Huang K, Wang Y, Siu KL et al. Targeting feed-forward signaling of TGF beta/NOX4/DHFR/eNOS uncoupling/TGF beta axis with anti-TGF beta and folic acid attenuates formation of aortic aneurysms: Novel mechanisms and therapeutics Redox Biology [PMID: 33126053] (WB, Mouse)

Cai M, Zhang H, Hou L et al. Inhibiting homologous recombination decreases extrachromosomal amplification but has no effect on intrachromosomal amplification in methotrexate-resistant colon cancer cells. Int J Cancer 2018-08-02 [PMID: 30070702]

Steven S, Oelze M, Hanf A et al. The SGLT2 inhibitor empagliflozin improves the primary diabetic complications in ZDF rats. Redox Biol 2017-06-22 [PMID: 28667906]

Ionova IA, Vasquez-Vivar J, Whitsett J et al. Deficient BH4 production via de novo and salvage pathways regulates NO responses to cytokines in adult cardiac myocytes. Am J Physiol Heart Circ Physiol. 2008-10-03 [PMID: 18835915]

Vodenicharov MD, Laterreur N, Wellinger RJ. Telomere capping in non-dividing yeast cells requires Yku and Rap1. EMBO J. 2010-07-13 [PMID: 20628356]

Kossmann S, Hu H, Steven S et al. Inflammatory Monocytes Determine Endothelial Nitric Oxide Synthase Uncoupling and Nitro-oxidative Stress Induced by Angiotensin II. J Biol Chem 2014-08-20 [PMID: 25143378]

Oelze M, Kroller-Schon S, Welschof P et al. The sodium-glucose co-transporter 2 inhibitor empagliflozin improves diabetes-induced vascular dysfunction in the streptozotocin diabetes rat model by interfering with oxidative stress and glucotoxicity. PLoS One. 2014-11-17 [PMID: 25402275]

Jabs A, Oelze M, Mikhed Y et al. Effect of soluble guanylyl cyclase activator and stimulator therapy on nitroglycerin-induced nitrate tolerance in rats. Vascul Pharmacol 2015-04-11 [PMID: 25869522]

Bhabha G, Ekiert DC, Jennewein M et al. Divergent evolution of protein conformational dynamics in dihydrofolate reductase. Nat Struct Mol Biol. 2013-11-01 [PMID: 24077226]

Siu KL, Miao XN, Cai H. Recoupling of eNOS with Folic Acid Prevents Abdominal Aortic Aneurysm Formation in Angiotensin II-Infused Apolipoprotein E Null Mice. PLoS ONE 2014-02-21 [PMID: 24558445] (WB, Mouse)

Yoon SA, Choi JR, Kim JO et al. Influence of reduced folate carrier and dihydrofolate reductase genes on methotrexate-induced cytotoxicity. Cancer Res Treat;42(3):163-71. 2010-09-01 [PMID: 20948922]



Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to H00001719-M01

NB800-PC1	HeLa Whole Cell Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/H00001719-M01

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications

