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Anti-DHFR Monoclonal Antibody

Catalog # ABO14413

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	P00374
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-DHFR Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	1719
Other Names	Dihydrofolate reductase, 1.5.1.3, DHFR
Calculated MW	21453
Application Details	WB 1:1000-1:5000 IHC 1:50-1:200 ICC/IF 1:50-1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ACBE-4
Immunogen	A synthesized peptide derived from human DHFR Key enzyme in folate metabolism. Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis.
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	DHFR (HGNC:2861)
Function	Catalyzes the reduction of 7,8-dihydrofolate (DHF) to 5,6,7,8-tetrahydrofolate in a NADPH-dependent manner (PubMed:12096917, PubMed:15039552,

PubMed:17569517, PubMed:19196009, PubMed:19478082, PubMed:21876184, PubMed:9719595). Key enzyme in folate metabolism. Contributes to the nuclear and mitochondrial de novo thymidylate biosynthesis pathway (PubMed:21876188, PubMed:22235121). Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis. Binds its own mRNA and that of DHFR2.

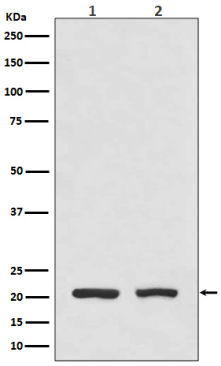
Cellular Location

Mitochondrion {ECO:0000250|UniProtKB:P00375}. Cytoplasm {ECO:0000250|UniProtKB:P00375}. Nucleus. Note=Localized to the nucleus during S and G2/M phases of the cell cycle. As a component of the de novo thymidylate synthesis complex, localizes specifically to replication forks during DNA synthesis (PubMed:22235121)

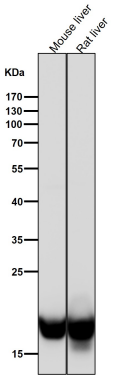
Tissue Location

Widely expressed in fetal and adult tissues, including throughout the fetal and adult brains and whole blood Expression is higher in the adult brain than in the fetal brain

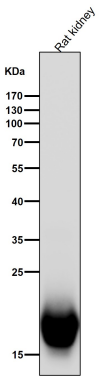
Images



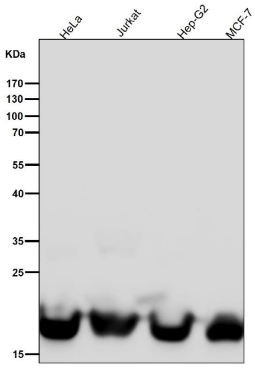
Western blot analysis of DHFR expression in (1) HeLa cell lysate; (2) Mouse spleen lysate.



All lanes use the Antibody at 1:8K dilution for 1 hour at room temperature.



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