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KD-Validated Anti-Dihydrofolate reductase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1194

Product Information

Application	WB, FC, ICC
Primary Accession	P00374
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB3575
Calculated MW	21453
Gene Name	DHFR
Aliases	DHFR; Dihydrofolate Reductase; DHFR1; EC 1.5.1.3; DHFRP1; DYR
Immunogen	A synthesized peptide derived from human DHFR

Additional Information

Gene ID	1719
Other Names	Dihydrofolate reductase, 1.5.1.3, DHFR

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

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