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DHFR Antibody

Rabbit mAb
Catalog # AP91383

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	P00374
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	DHFR; DHFRP1; Dihydrofolate reductase; DYR;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	21453

Additional Information

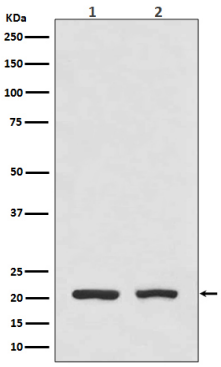
Dilution	WB 1:1000~1:5000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human DHFR
Description	Key enzyme in folate metabolism. Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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.

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