Human/Mouse/Rat Dihydrofolate Reductase/DHFR Alexa Fluor® 532-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 872442

Catalog Number: FAB7934X

100 µg

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Dihydrofolate Reductase/DHFR in ELISA. Detects human, mouse and rat Dihydrofolate Reductase in Western Blots.
Source	Monoclonal Mouse IgG_{2B} Clone # 872442
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human Dihydrofolate Reductase/DHFR Met1-Asp187 Accession # P00374
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DHFR (DiHydroFolate Reductase; also Tetrahydrofolate dehydrogenase) is a 21-23 kDa member of the dihydrofolate reductase family of enzymes. It is a ubiquitously expressed monomer, and considered to be a housekeeping gene. Housekeeping genes are those that play a role in multiple pathways, although not the same pathway(s) in all cells. DHFR participates in the reduction of dihydrofolate to tetrahydrofolate, a product that is subsequently used in the synthesis of purines and thymidylic acid that are used to generate both RNA and DNA. Within the cell, DHFR is known to exist in two pools: one contains DHFR bound to its own RNA where it acts as a transcriptional repressor, while another contains DHFR bound to NADPH. Human DHFR is 187 amino acids (aa) in length and possesses one DHFR domain (aa 4-185). Its mRNA binding motif is suggested to involve Cys6, Leu22, Glu30 and Ser118. There is one potential alternative start site found 75 aa upstream of the standard start site. Full length human DHFR (aa 1-187) shares 90% aa sequence identity with mouse DHFR.

PRODUCT SPECIFIC NOTICES

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