Product information

Monoclonal anti-human DHFR antibody (clone AT5B2)

Mouse IgG_1, κ

Cat. No. IBATGA0376

Immunogen: Recombinant human DHFR (1-187aa) purified from *E. coli*

NCBI Accession No.: NP_000782.1

Isotype: Mouse IgG_1 heavy chain and κ light chain

Clone: Anti-human DHFR mAb, clone AT5B2, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human DHFR protein.

Description: Dihydrofolate reductase (DHFR) catalyzes the NADPH-dependent reduction of dihydrofolate to tetrahydrofolate, and is a crucial enzyme for the synthesis of purines, pyrimidines and some amino acids. Inhibition of the activity of this enzyme leads to arrest of DNA synthesis and cell death. Gene expression of methotrexate (MTX)-resistant variants of DHFR in normal hematopoietic cells is a potential strategy to permit administration of larger doses of MTX by alleviating drug toxicity in normal cells and tissues that are drug sensitive.

Concentration: 1 mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

Storage: Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

Usage: The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended starting dilution for Western blot analysis is 1:1000

Application: ELISA, WB, Flow cytometry, ICC/IF

Manufactured for:
Immuno-Biological Laboratories, Inc. (IBL-America)
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA
Phone: (888) 523-1246 Fax.: (763) 780-2988
Email: info@ibl-america.com Web: www.ibl-america.com

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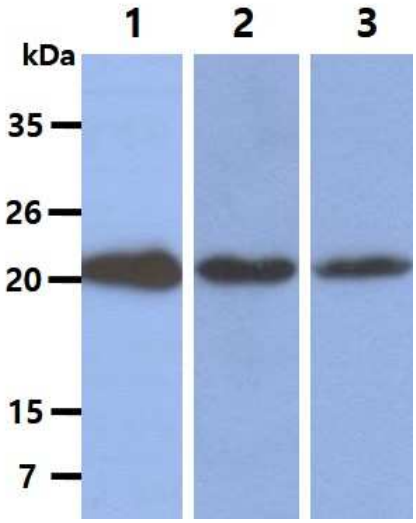
Western blot analysis

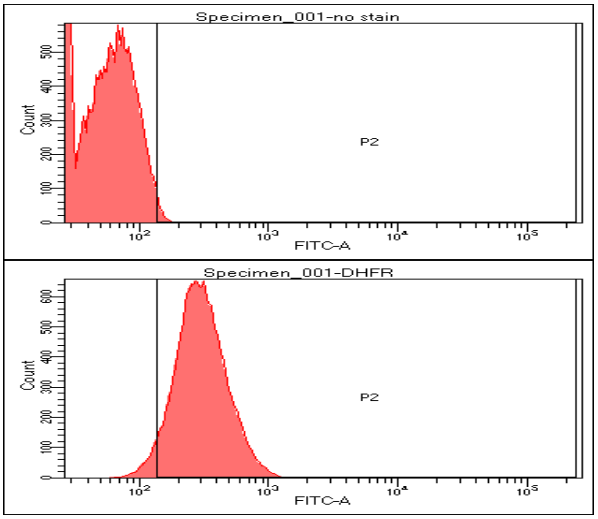
The Cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human DHFR antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



Lane 1. : HeLa cell lysate
Lane 2. : Jurkat cell lysate
Lane 3 : 293T cell lysate

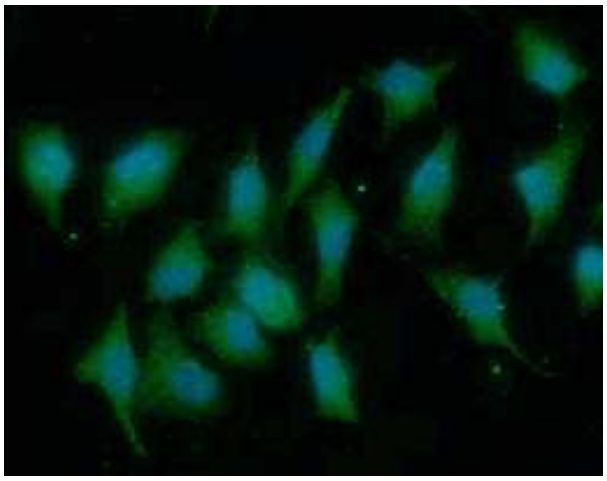
Flow cytometry

Flow cytometry analysis of DHFR in HeLa cell line, staining at 2-5ug for 1x10^{6}cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate.



ICC/IF analysis

ICC/IF analysis of DHFR in A549 cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human DHFR antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



General references: Chen MJ., *et al*. (1984) *J Biol Chem*. **259(6)**: 3933-3943.
Cody V., *et al*. (2009) *Biochemistry*. **48(8)**: 1702-1711.

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