

Mouse Recombinant DHFR

CATALOG #: 6383-100 100 μg

ALTERNATE NAMES: Dihydrofolate reductase.

SOURCE: E.Coli

PURITY: > 95% by SDS - PAGE

MOL. WEIGHT: 23.8 kDa (207 aa, 1-187 aa + NT His-Tag)

FORMULATION: 1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0)

containing 0.1 M NaCl, 2 mM DTT and 10% glycerol.

STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

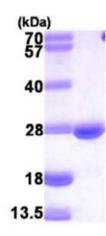
Dihydrofolate reductase (DHFR) is a member of the reductase family of enzymes that is ubiquitously expressed in all organisms. DHFR catalyzes the NADPH-dependent reduction of dihydrofolate to tetrahydrofolate, and it is essential for the synthesis of thymidylate, purines and several amino acids. Expression 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.

AMINO ACID SEQUENCE:

MGSSHHHHHH SSGLVPRGSH MVRPLNCIVA VSQNMGIGKN GDLPWPPLRN EFKYFQRMTT TSSVEGKQNL VIMGRKTWFS IPEKNRPLKD RINIVLSREL KEPPRGAHFL AKSLDDALRL IEQPELASKV DMVWIVGGSS VYQEAMNQPG HLRLFVTRIM QEFESDTFFP EIDLGKYKLL PEYPGVLSEV QEEKGIKYKF EVYEKKD

BIOLOGICAL ACTIVITY:

Specific activity is > 0.2 units/mg and was obtained by measuring the oxidation of NADPH in absorbance at 340 nm during reaction. One unit will convert 1.0 µmole of 7, 8 dihydrofolate and beta-NADPH to 5, 6, 7, 8-tetrahydrofolate and beta-NADP per minute at pH 6.5 at 25°C.



15% SDS-PAGE (3ug)

Mouse Recombinant DHFR

RELATED PRODUCTS:

Human Recombinant DHFR (Cat. No. 6382-100)

FOR RESEARCH USE ONLY! Not to be used in humans.

