

**Mouse Recombinant DHFR**

<b>CATALOG #:</b>	6383-100	100 µg
<b>ALTERNATE NAMES:</b>	Dihydrofolate reductase.	
<b>SOURCE:</b>	E.Coli	
<b>PURITY:</b>	> 95% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	23.8 kDa (207 aa, 1-187 aa + NT His-Tag)	
<b>FORMULATION:</b>	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 EYVEKKD

**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 (3µg)

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**RELATED PRODUCTS:**

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

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