

Dihydrofolate Reductase Active Protein | DHFR active protein

Recombinant Human Dihydrofolate Reductase

CATALOG #
AAA38726

HOST
Escherichia Coli

PRODUCT SYNONYMS

Dihydrofolate Reductase; Recombinant Human Dihydrofolate Reductase; DHFR Human; Dihydrofolate Reductase Human Recombinant; Dihydrofolate reductase; DHFR; DHFRP1; DHFR active protein

PRODUCT SPECIFICATIONS

Host	Escherichia Coli
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	The DHFR solution (1mg/ml) contains 20mM Tris-HCl buffer (pH8.0), 0.1M NaCl 2mM DTT, and 30% glycerol.
Concentration	1 mg/ml (varies by lot)
Sequence	MGSSHHHHH SSGLVPRGSH MVGSLNCIVA VSQNMGIGKN GDLWPPLRN EFRYFQRM TT TSSVEGKQNL VIMGKKTWFS IPEKNRPLKG RINLVLSREL KEPPQGAHFL SRSDDALKL TEQPELANKV DMVWIVGGSS VYKEAMNHPG HLKLFVTRIM QDFESDTFFP EIDLEKYKLL PEYPGVLSDV QEEKGIKYKF EVYEKND.
Sequence Length	187
Physical Appearance	Sterile Filtered colorless solution.
Biological Activity	Specific activity is >3500 pmol/min/ug is defined as the amount of enzyme that converts 1.0 pmole of dihydrofolic acid to tetrahydrofolic acid per minute at pH 6.5 at 25C.
Preparation and Storage	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for DHFR active protein	Description: DHFR Human Recombinant fused with 20 amino acid His tag at N-terminus produced in E Coli is a single, non-glycosylated, polypeptide chain containing 207 amino acids (1-187 a.a.) and having a molecular mass of 23.6kDa. The DHFR is purified by proprietary chromatographic techniques. Introduction: Dihydrofolate reductase (DHFR) is an enzyme that reduces dihydrofolic acid to tetrahydrofolic acid, with NADPH as electron donor that can be converted to the kinds of tetrahydrofolate cofactors applied in 1-carbon transfer chemistry. DHFR converts dihydrofolate into tetrahydrofolate, which is a methyl group shuttle required for the de novo synthesis of purines, thymidylic acid, and specific amino acids. Even though the functional DHFR gene is mapped to chromosome 5, numerous intronless processed pseudogenes or dihydrofolate reductase-like genes are identified on separate chromosomes. DHFR deficiency is associated with megaloblastic anemia. DHFR knockdown plays a role in the anticancer activity of 2-hydroxyoleic acid. DHFR gene insertion/deletion polymorphism is linked to variation in serum and red blood cell folate concentrations in women.
Product Categories/Family for DHFR active protein	Enzymes; Reductase

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503323
-----------	---------

NCBI GeneID	1719
NCBI Accession #	NP_000782.1
NCBI GenBank Nucleotide #	NM_000791.3
UniProt Accession #	P00374; Q14130; Q6IRW8; B4DDD2
NCBI Official Full Name	dihydrofolate reductase isoform 1
NCBI Official Synonym Full Names	dihydrofolate reductase
NCBI Official Symbol	DHFR
NCBI Official Synonym Symbols	DYR; DHFRP1
NCBI Protein Information	dihydrofolate reductase
UniProt Protein Name	Dihydrofolate reductase
UniProt Gene Name	DHFR
UniProt Entry Name	DYR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/escherichia-coli-dhfr-active-protein/dihydrofolate-reductase/38726>