

Product datasheet for **RC200089**

DHFR (NM_000791) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: DHFR (NM_000791) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: DHFR
Synonyms: DHFRP1; DYR
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC200089 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTTGGTTCGCTAAACTGCATCGTCGCTGTGTCCAGAACATGGGCATCGGCAAGAACGGGGACCTGC
 CCTGGCCACCGCTCAGGAATGAATTCAGATATTTCCAGAGAATGACCACAACCTTTCAGTAGAAGGTAA
 ACAGAATCTGGTGATTATGGGTAAGAAGACCTGGTCTCCATTCTGAGAAGAATCGACCTTTAAAGGT
 AGAATTAATTTAGTTCTCAGCAGAGAATCAAGGAACCTCCACAAGGAGCTCATTTTCTTCCAGAAGTC
 TAGATGATGCCTAAAACCTTACTGAACAACCAGAATTAGCAAATAAAGTAGACATGGTCTGGATAGTTGG
 TGGCAGTTCTGTTTATAAGGAAGCCATGAATCACCCAGGCCATCTAAACTATTTGTGACAAGGATCATG
 CAAGACTTTGAAAGTGACACGTTTTTCCAGAAATGATTTGGAGAAATATAAACTTCTGCCAGAATACC
 CAGGTGTTCTCTGATGTCCAGGAGGAGAAAGGCATTAAGTACAAATTTGAAGTATATGAGAAGAATGA
 T

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200089 protein sequence
 Red=Cloning site Green=Tags(s)

MVGLNCIVAVSQNMGIGKNGDLPWPLRNEFRYFQRM TTTSSVEGKQNLVIMGKKTWFSIPEKNRPLKG
 RINLVL SRELKEPPQGAHFLSRSLDDALKLTEQPELANKVD MVWIVGGSSVYKEAMNHPGHLKLFVTRIM
 QDFESDTFFPEIDLEKYKLLPEYPGVLSDVQEEKGIKYKFEVYEKND

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

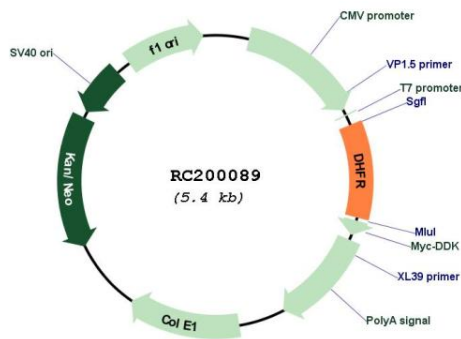


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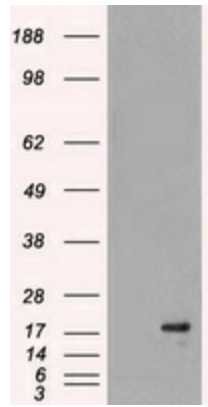
RefSeq ORF:	564 bp
Locus ID:	1719
UniProt ID:	P00374
Cytogenetics:	5q14.1
Domains:	DiHfolate_red
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Folate biosynthesis, Metabolic pathways, One carbon pool by folate
MW:	21.5 kDa

Gene Summary: Dihydrofolate reductase converts dihydrofolate into tetrahydrofolate, a methyl group shuttle required for the de novo synthesis of purines, thymidylic acid, and certain amino acids. While the functional dihydrofolate reductase gene has been mapped to chromosome 5, multiple intronless processed pseudogenes or dihydrofolate reductase-like genes have been identified on separate chromosomes. Dihydrofolate reductase deficiency has been linked to megaloblastic anemia. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2014]

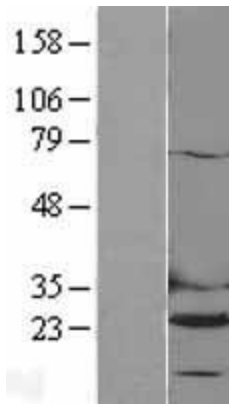
Product images:



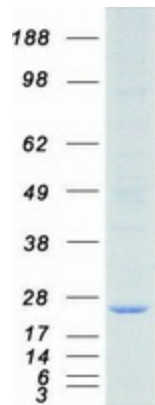
Circular map for RC200089



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DHFR (Cat# RC200089, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DHFR antibody (Cat# [TA500517]). Positive lysates [LY400271] (100ug) and [LC400271] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400271]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200089 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DHFR protein (Cat# [TP300089]). The protein was produced from HEK293T cells transfected with DHFR cDNA clone (Cat# RC200089) using MegaTran 2.0 (Cat# [TT210002]).