

Product datasheet for MR201752

Dhfr (NM_010049) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dhfr (NM_010049) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Dhfr
Synonyms: 8430436I03Rik; AA607882; AI662710; AW555094
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201752 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTTCGACCATTGAACTGCATCGTCGCCGTGTCCAAAATATGGGGATTGGCAAGAACGGAGACCTAC
 CCTGGCCTCCGCTCAGGAACGAGTTCAAGTACTTCAAAGAATGACCACAACCTCTTCAGTGAAGGTAA
 ACAGAATCTGGTGATTATGGGTAGGAAAACCTGGTTCTCCATTCTGAGAAGAATCGACCTTTAAAGGAC
 AGAATTAATATAGTTCTCAGTAGAGAACTCAAAGAACCACCACGAGGAGCTCATTTTCTGCCAAAAGTT
 TGGATGATGCCTAAGACTTATTGAACAACCGAATTGGCAAGTAAAGTAGACATGGTTTGGATAGTCGG
 AGGCAGTTCTGTTTACCAGGAAGCCATGAATCAACCAGGCCACCTCAGACTCTTTGTGACAAGGATCATG
 CAGGAATTTGAAAGTGACACGTTTTTCCCAGAAATGATTTGGGGAAATATAAACTTCTCCAGAATACC
 CAGGCGTCTCTCTGAGGTCCAGGAGGAAAAAGGCATCAAGTATAAGTTTGAAGTCTACGAGAAGAAAGA
 C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201752 protein sequence
 Red=Cloning site Green=Tags(s)

MVRPLNCIVAVSQNMGIGKNGDLPWPPLRNEFKYFQRM TTTSSVEGKQNLVIMGRKTFWFSIPEKNRPLKD
 RINIVLSRELKEPPRGAHFLAKSLDDALRLIEQPELASKVDMVWIVGGSSVYQEAMNQPGLRLFVTRIM
 QEFESDTFFPEIDLKGYKLLPEYPGVLSEVQEEKGIKYKFEVYEKKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_010049

ORF Size: 564 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_010049.3](#), [NP_034179.1](#)

RefSeq Size: 5307 bp

RefSeq ORF: 564 bp

Locus ID: 13361

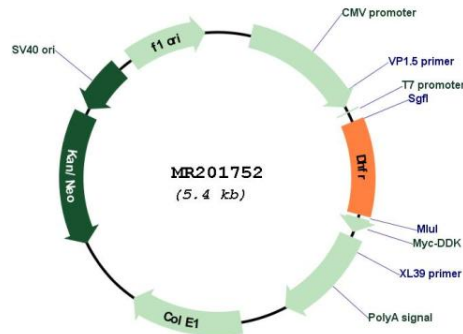
UniProt ID: [P00375](#)

Cytogenetics: 13 47.64 cM

MW: 21.6 kDa

Gene Summary: Key enzyme in folate metabolism. Contributes to the de novo mitochondrial thymidylate biosynthesis pathway (PubMed:25980602). Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis (PubMed:25980602). Binds its own mRNA.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201752