

Product datasheet for **MG201752**

Dhfr (NM_010049) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dhfr (NM_010049) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Dhfr
Synonyms: 8430436I03Rik; AA607882; AI662710; AW555094
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201752 representing NM_010049
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTCGACCATTGAACTGCATCGTCGCCGTGTCCAAAATATGGGGATTGGCAAGAACGGAGACCTAC
CCTGGCCTCCGCTCAGGAACGAGTTCAAGTACTCCAAAGAATGACCACAACCTCTTCAGTGGAAGGTAA
ACAGAATCTGGTGATTATGGGTAGGAAAACCTGGTCTCCATTCTGAGAAGAATCGACCTTTAAAGGAC
AGAATTAATATAGTTCTCAGTAGAGAACTCAAAGAACCACCACGAGGAGCTCATTTCTTGCCAAAAGTT
TGGATGATGCCTAAGACTTATTGAACAACCGGAATTGGCAAGTAAAGTAGACATGGTTTGATAGTCGG
AGGCAGTTCTGTTTACCAGGAAGCCATGAATCAACCAGGCCACCTCAGACTCTTTGTGACAAGGATCATG
CAGGAATTTGAAAGTGACACGTTTTTCCAGAAATTGATTTGGGGAAATATAAACTCTCCAGAAATACC
CAGGCGTCTCTCTGAGGTCCAGGAGGAAAAAGGCATCAAGTATAAGTTTGAAGTCTACGAGAAGAAAGA
C

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201752 representing NM_010049
Red=Cloning site Green=Tags(s)

MVRPLNCIVAVSQNMGIGKNGDLPWPPLRNEFKYFQRMTTSSVEGKQNLVIMGRKTFWFSIPEKNRPLKD
RINIVLSRELKEPPRGAHFLAKSLDDALRLIEQPELASKVDMVWIVGGSSVYQEAMNQPHLRLFVTRIM
QEFESDTFFPEIDLGKYKLLPEYPGVLSEVQEEKGIKYKFEVYEKGD

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:



ACCN: NM_010049

ORF Size: 561 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

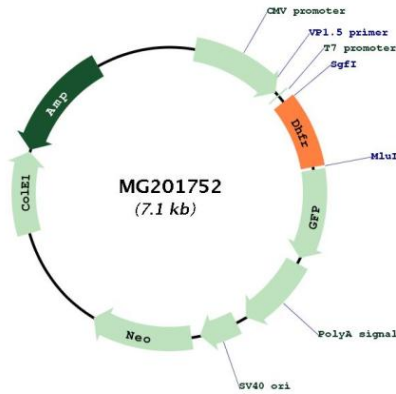
UniProt ID: [P00375](#)

Cytogenetics: 13 47.64 cM

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 MG201752