

Product datasheet for **RC208784**

MTRR (NM_002454) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTRR (NM_002454) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MTRR
Synonyms:	cbIE; MSR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208784 representing NM_002454
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGACAGGCAAAGGCCATCGCAGAAGAAATATGTG
 AGCAAGCTGTGGTACATGGATTTCTGCAGATCTCACTGTATTAGTGAATCCGATAAGTATGACCTAAA
 AACCGAAACAGCTCCTCTTGTGTTGTGGTTTCTACCACGGGCACCGGAGACCCACCCGACACAGCCCGC
 AAGTTTGTAAAGGAAATACAGAACCAAACACTGCCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTAC
 TGGGTCTCGGTGATTGAGAATACACCTACTTTTGAATGGGGGAAGATAATTGATAAACGACTTCAAGA
 GCTTGGAGCCCGCATTCTATGACACTGGACATGCAGATGACTGTAGGTTTAGAAGTTGTGGTTGAG
 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAAGAGGAGATAA
 GTGGCGCACTCCCGGTGGCATCACCTGCATCCTCGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACAT
 TGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAGGAAGAAAGGATTCTGAGGTTTTGAAGCAAAT
 GCAGTGAACAGCAACCAATCCAATGTTGTAATTGAAGACTTTGAGTCTCACTTACCCGTTCCGGTACCCC
 CACTCTCACAAAGCCTCTCTGAATATTCCTGGTTTACCCCAAGAAATTTACAGGTACATCTGCAGGAGTC
 TCTTGGCCAGGAGAAAGCCAAGTATCTGTGACTTCAAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG
 GCAGTTCAACTTACTACGAATGATGCCATAAAAACCACTCTGCTGGTAGAATTGGACATTTCAAATACAG
 ACTTTTCTATCAGCCTGGAGATGCCTTCAAGCTGATCTGCCCTAACAGTGATTCTGAGGTACAAAGCCT
 ACTCAAAGAGCTGAGCTGAAGATAAAAGAGAGCACTGCGTCTTTTGAATAAAGGCAGACACAAG
 AAGAAAGGAGCTACCTTACCCAGCATATACCTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTC
 TTGAAATCCGAGCAATTCCTAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAGTGACAGTGCTGA
 AAAGCGCAGGCTACAGGAGCTGTGCAGTAAACAAGGGGCAGCCGATTATAGCCGCTTTGTACGAGATGCC
 TGTGCCTGCTTGTGGATCTCCTCCTCGCTTTCCTTCTTGCAGCCACCACTCAGTCTCCTGCTCGAAC
 ATCTTCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTATTTACCCAGGAAAGCTCCA
 TTTTGTCTTCAACATTGTGGAATTTCTGTCTACTGCCACAACAGAGGTTCTGCGGAAGGGAGTATGTACA
 GGCTGGCTGGCCTTGTGGTTGCTTCAAGTCTTCAAGCAACATACATGCATCCCATGAAGACAGCGGGA
 AAGCCCTGGCTCCTAAGATATCCATCTCCTCGAACAACAAATCTTTCCACTTACCAGATGACCCCTC
 AATCCCATCATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTGGTTCCTACAACATAGAGAG
 AAATCCAAGAACAACACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTTTGGCTGCAGGCATAAGG
 ATAGGGATTATCTATTCAGAAAAGAGCTCAGACATTTCTTAAGCATGGGATCTTAACATCTAAAGGT
 TTCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCCCAAGTATGTGCAAGCAACATCCAG
 CTTATGGCCAGCAGGTGGCGAGAATCCTCCTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAA
 AGAATATGGCCAAGGATGACATGATGCCCTTGTGCAAAATAAAGCAAAGAGGTTGGAGTTGAAAAACT
 AGAAGCAATGAAAACCTGGCCACTTTAAAAGAAGAAAAACGCTACCTTCAGGATATTTGGTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RC208784 representing NM_002454
Red=Cloning site Green=Tags(s)

MRRFLLL YATQQGQAKAIAEEICEQAVVHGF SADLHCISESDKYDLKTETAPLVVVVSTTGTGDPPTAR
 KFVKEIQNTLPVDFFAHLRYGLLGLDSEYTYFCNGGKIIDKRLQELGARHFYDTGHADDCVGLLELVE
 PWIAGLWPALRKHFRSSRQEEISGALPVASPASSRTDLVKSSELLHIESQVELLRFDDSGRKDSEVLKQN
 AVNSNQSNVVIEDFESSL TRSVPLSQASLNIPGLPPEYLQVHLQESLQEEESQVSVTSADPVFQVPI SK
 AVQLTTNDAIKTLLVELDISNTDFSYQPGDAF SVICPNSDSEVQSLQLRQLLEDKREHCVLLKIKADTK
 KKGATLPQHIPAGCSLQFIFTWCLEIRAIPKKAFLRALVDYTSDSAERKRLQELCSKQGAADYSRFVRDA
 CACLLDLLAFPSQPPLSLLLEHLPLKQPRPYSACSSSLFHPGKLFHFVNIVEFLSTATTEVLRKGVCT
 GWLALLVASVLQPNIHASHEDSGKALAPKISISPRTTNSFHL PDDPSIPIIMVGPGTGIAPFIGFLQHRE
 KLQEQHPDGNFGAMWLF GCRHKDRDYLFRKELRHFLKHGILTHLKVSFSRDAPVGE EEA PAKYVQDNIQ
 LHGQQVARILLQENGIYVCGDAKNMAKDVHDALVQIISKEVGEKLEAMKTLATLKEEKRYLQDIWS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_002454

ORF Size: 2094 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_002454.3](#)

RefSeq Size: 3317 bp

RefSeq ORF: 2097 bp

Locus ID: 4552

UniProt ID: [Q9UBK8](#)

Cytogenetics: 5p15.31

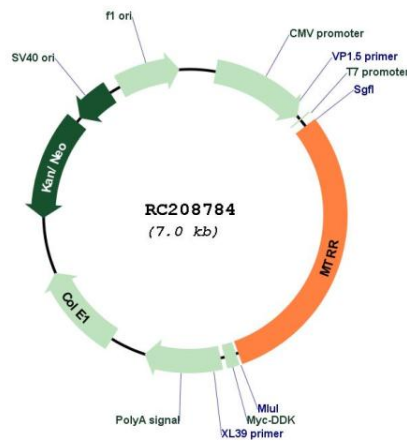
Domains: flavodoxin, NAD_binding_1, FAD_binding_1

Protein Families: Druggable Genome

MW: 77.7 kDa

Gene Summary: This gene encodes a member of the ferredoxin-NADP(+) reductase (FNR) family of electron transferases. This protein functions in the synthesis of methionine by regenerating methionine synthase to a functional state. Because methionine synthesis requires methyl-group transfer by a folate donor, activity of the encoded enzyme is important for folate metabolism and cellular methylation. Mutations in this gene can cause homocystinuria-megaloblastic anemia, cbl E type. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RC208784