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Product datasheet for RG208784

MTRR (NM_002454) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTRR (NM_002454) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MTRR
Synonyms:	cblE; MSR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG208784 representing NM_002454
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGACAGGCAAAGGCCATCGCAGAAGAAATATGTG
AGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAATCCGATAAGTATGACCTAAA
AACCGAAACAGCTCCTCTTGTTGTTGTGGTTTCTACCACGGGCACCGGAGACCCACCCGACACAGCCCGC
AAGTTTGTTAAGGAAATACAGAACCAAACACTGCCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTTAC
TGGGTCTCGGTGATTCAGAATACACCTACTTTTGCAATGGGGGGAAGATAATTGATAAACGACTTCAAGA
GCTTGGAGCCCGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG
CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAAGAGGAGATAA
GTGGCGCACTCCCGGTGGCATCACCTGCATCCTCGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACAT
TGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGAAGAAAGGATTCTGAGGTTTTGAAGCAAAAT
GCAGTGAACAGCAACCAATCCAATGTTGTAATTGAAGACTTTGAGTCCTCACTTACCCGTTCGGTACCCC
CACTCTCACAAGCCTCTCTGAATATTCCTGGTTTACCCCCAGAATATTTACAGGTACATCTGCAGGAGTC
TCTTGGCCAGGAGGAAAGCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAATTTCAAAG
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AAGCCCTGGCTCCTAAGATATCCATCTCTCCTCGAACAACAAATTCTTTCCACTTACCAGATGACCCCTC
AATCCCCATCATAATGGTGGGTCCAGGAACCGGCATAGCCCCGTTTATTGGGTTCCTACAACATAGAGAG
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ATAGGGATTATCTATTCAGAAAAGAGCTCAGACATTTCCTTAAGCATGGGATCTTAACTCATCTAAAGGT
TTCCTTCTCAAGAGATGCTCCTGTTGGGGAGGAGGAAGCCCCAGCAAAGTATGTGCAAGACAACATCCAG
CTTCATGGCCAGCAGGTGGCGAGAATCCTCCTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATGCAA
AGAATATGGCCAAGGATGTACATGATGCCCTTGTGCAAATAATAAGCAAAGAGGTTGGAGTTGAAAAACT
AGAAGCAATGAAAACCCTGGCCACTTTAAAAGAAGAAAAACGCTACCTTCAGGATATTTGGTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

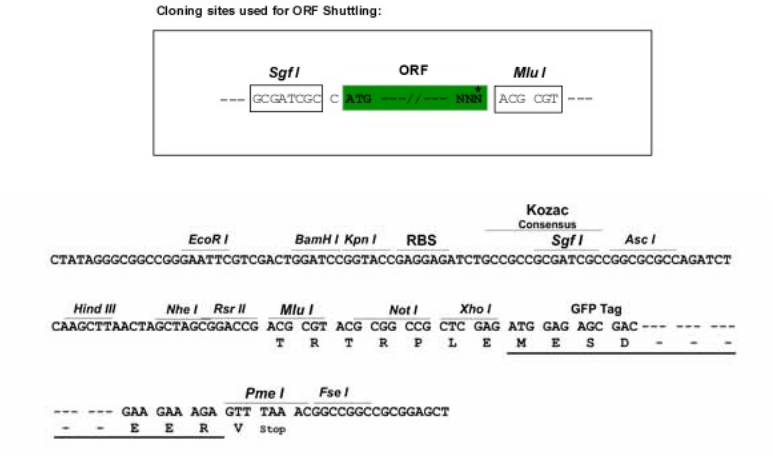
>RG208784 representing NM_002454
Red=Cloning site Green=Tags(s)

MRRFLLLYATQQGQAKAIAEEICEQAVVHGFSADLHCISESDKYDLKTETAPLVVVVSTTGTGDPPDTAR
KFVKEIQNQTLPVDFFAHLRYGLLGLGDSEYTYFCNGGKIIDKRLQELGARHFYDTGHADDCVGLELVVE
PWIAGLWPALRKHFRSSRGQEEISGALPVASPASSRTDLVKSELLHIESQVELLRFDDSGRKDSEVLKQN
AVNSNQSNVVIEDFESSLTRSVPPLSQASLNIPGLPPEYLQVHLQESLGQEESQVSVTSADPVFQVPISK
AVQLTTNDAIKTTLLVELDISNTDFSYQPGDAFSVICPNSDSEVQSLLQRLQLEDKREHCVLLKIKADTK
KKGATLPQHIPAGCSLQFIFTWCLEIRAIPKKAFLRALVDYTSDSAEKRRLQELCSKQGAADYSRFVRDA
CACLLDLLLAFPSCQPPLSLLLEHLPKLQPRPYSCASSSLFHPGKLHFVFNIVEFLSTATTEVLRKGVCT
GWLALLVASVLQPNIHASHEDSGKALAPKISISPRTTNSFHLPDDPSIPIIMVGPGTGIAPFIGFLQHRE
KLQEQHPDGNFGAMWLFFGCRHKDRDYLFRKELRHFLKHGILTHLKVSFSRDAPVGEEEAPAKYVQDNIQ
LHGQQVARILLQENGHIYVCGDAKNMAKDVHDALVQIISKEVGVEKLEAMKTLATLKEEKRYLQDIWS

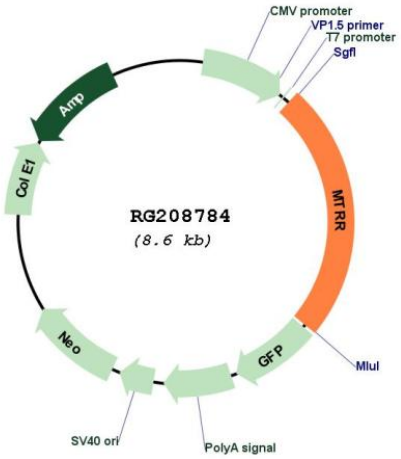
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



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
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]