OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RR212063

Mthfd1 (NM_022508) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mthfd1 (NM_022508) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mthfd1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>RR212063 representing NM_022508
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCACCAGCGGGAATCCTGAACGGGAAAGTGGTCTCCGCGCAAATCAGGAATCGACTGAAGACCCAGG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RR212063 representing NM_022508
Red=Cloning site Green=Tags(s)

MAPAGILNGKVVSAQIRNRLKTQVTQMQEQVPGFTPGLAILQVGDRDDSNLYINVKLKAAQEIGIKATHI
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KDCFIPCTPKGCLELIKETGVQIAGRHAVVVGRSKIVGAPMHDLLLWNNATVTTCHSKTADLDKEVNKGD
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FDISVASEIMAVLALTSSLEDMRARLGKMVVASSKKGEPISCEDLGVSGALTVLMKDAIKPNLMQTLEGT
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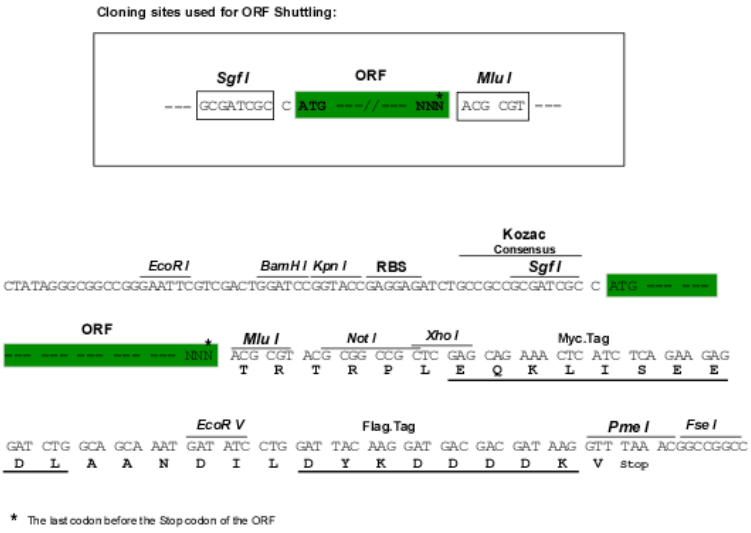
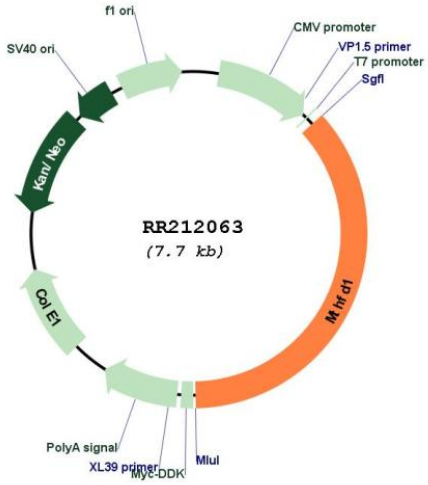
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_022508
ORF Size:	2805 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_022508.1, NP_071953.1
RefSeq Size:	3332 bp
RefSeq ORF:	2808 bp
Locus ID:	64300
UniProt ID:	P27653
Cytogenetics:	6q24

MW:	101 kDa
Gene Summary:	a trifunctional enzyme combining a 10-formyl-H4folate synthetase, a 5,10-methenyl-H4folate cyclohydrolase, and a 5,10-methylene-H4folate dehydrogenase [RGD, Feb 2006]