

Product datasheet for RC208588L1

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OriGene Technologies, Inc.

MTHFR (NM_005957) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MTHFR (NM_005957) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: MTHFR

Mammalian Cell None

Selection:

Vector: pLenti-C-Myc-DDK (PS100064)

E. coli Selection: Chloramphenicol (34 ug/mL)

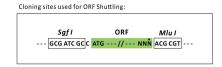
ORF Nucleotide

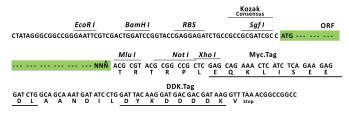
The ORF insert of this clone is exactly the same as(RC208588).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_005957 **ORF Size:** 1968 bp





MTHFR (NM_005957) Human Tagged Lenti ORF Clone - RC208588L1

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: <u>NM 005957.2</u>, <u>NP 005948.2</u>

RefSeq Size: 6099 bp
RefSeq ORF: 1971 bp
Locus ID: 4524
UniProt ID: P42898

Cytogenetics: 1p36.22

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Methane metabolism, One carbon pool by folate

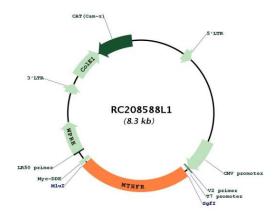
MW: 74.4 kDa

Gene Summary: The protein encoded by this gene catalyzes the conversion of 5,10-methylenetetrahydrofolate

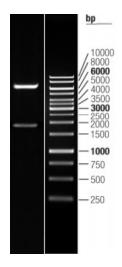
to 5-methyltetrahydrofolate, a co-substrate for homocysteine remethylation to methionine. Genetic variation in this gene influences susceptibility to occlusive vascular disease, neural tube defects, colon cancer and acute leukemia, and mutations in this gene are associated with methylenetetrahydrofolate reductase deficiency.[provided by RefSeq, Oct 2009]



Product images:



Circular map for RC208588L1



Double digestion of RC208588L1 using Sgfl and Mlul $\,$