

Product datasheet for RC200297L4

MTHFD1 (NM_005956) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTHFD1 (NM_005956) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	MTHFD1
Synonyms:	CIMAH; MTHFC; MTHFD
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC200297).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

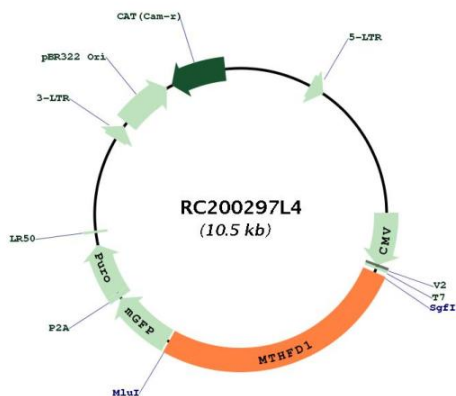
ACCN:	NM_005956
ORF Size:	2805 bp



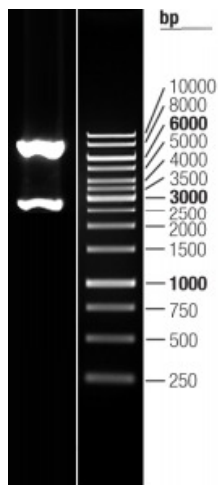
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OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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:	<ol style="list-style-type: none">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_005956.2 , NP_005947.2
RefSeq Size:	3466 bp
RefSeq ORF:	2808 bp
Locus ID:	4522
UniProt ID:	P11586
Cytogenetics:	14q23.3
Domains:	FTHFS, THF_DHG_CYH
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Glyoxylate and dicarboxylate metabolism, Metabolic pathways, One carbon pool by folate
MW:	101.5 kDa
Gene Summary:	This gene encodes a protein that possesses three distinct enzymatic activities, 5,10-methylenetetrahydrofolate dehydrogenase, 5,10-methenyltetrahydrofolate cyclohydrolase and 10-formyltetrahydrofolate synthetase. Each of these activities catalyzes one of three sequential reactions in the interconversion of 1-carbon derivatives of tetrahydrofolate, which are substrates for methionine, thymidylate, and de novo purine syntheses. The trifunctional enzymatic activities are conferred by two major domains, an aminoterminal portion containing the dehydrogenase and cyclohydrolase activities and a larger synthetase domain. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC200297L4



Double digestion of RC200297L4 using SgfI and MluI