

Product datasheet for **RC202227**

LCMT2 (NM_014793) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	LCMT2
Synonyms:	PPM2; TYW4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC202227 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGC**C

 ATGGGCCCCCGAGCCGTGAGCGTCGGCAGGCGCGGTACAGAACACCAACGACAGCAGCGCCCTCAGCA
AGCGTTCCCTGGCGCGCGCGGGTACGTGCAGGACCCCTTTGCCGCGTTGCTGGTTCCGGGCGCGCGCG
CCGCGCACCGCTCATTACCGAGGCTACTACGTCCGCGCACGCGCGGTGAGGCACTGCGTGCGCGTTTT
TTGGAGCAGATTGGCGCGCCCCAGGCCGCGCTTCGCGCGCAGATCTTGTCTCTCGGCGCTGGCTTCGACT
CGCTCTATTTTCGCTTAAAAACCGCGGGCCGCTGGCCCGGGCTGCAGTCTGGGAGGTGGATTTCCGGA
CGTGGCGCGCGCAAAGCAGAAAGGATTGGAGAGACGCCAGAGCTGTGCGGTTAACCGGCCCTTCGAG
AGGGGGGAGCCCGCTCCGCGCTGTGCTTTGAGAGCGCAGCTACTGCATCCTGGGTCTGGACTTCGGGC
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GAGGATTTGGAGAGCAGGAGGGGCGGCACTGCCGAGTGAGCCAGTTTCACTTGCTCTCAAGAGATTGTGA
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TCCTGCTCCTTGGAGGTGGTGGAACTGCTTTTCCTTTGGTACCTACTTCAACCCCATACAGTCACATT
AGACCTTTCTTCTTAAGTGCTGGGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202227 protein sequence
 Red=Cloning site Green=Tags(s)

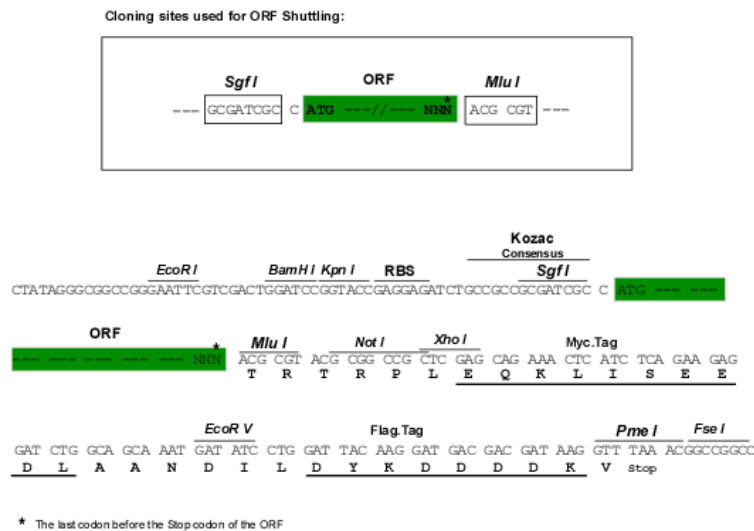
MGPRSRERRAGAVQNTNDSSALSKRSLAARGYVQDPFAALLVPGAARRAPLIHRGYVVRARAVRHCVRAF
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 RGE PASALCFESADYCI LGLDLRQLQRVEEALGAAGLDAASPTLLLA EAVLTYLEPESAAALI AWA AQR F
 PNALFV VYEQMRPQDAFGQF MLQHFRQLNSPLHGLERFPDVEAQRRRFLQAGWTACGAVDMNEFYHCFLP
 AEERRRVENIEPFDEFEEWHLKCAHYFILAASRGDTLSHTLVFPSSSEAFPRVNPASPSGVFPASVVSSEG
 QV PNLKRYGHASVFLSPDVILSAGGFGEQEGRHCRVSQFHLLSRDCDSEWKGSQIGSCGTGVQWDGRLYH
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 SVLFLRPISCGFLWESVDIQPPITPRYSHTAHLNGKLLL VGGIWIHSSSFPGVTVINLT TGLSSEYQID
 TTYVPWPLMLHNHTSILLPEEQQLLLLGGGNCFSFGTYFNPHVTLDLSSLSAGQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6306_c04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014793

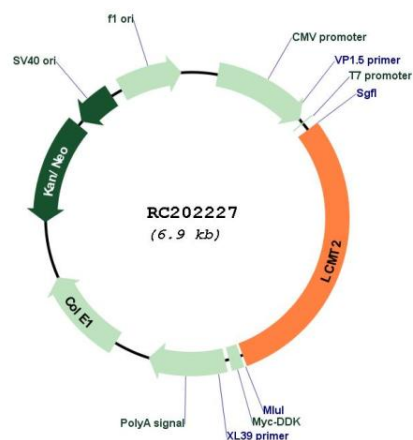
ORF Size: 2058 bp

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](#)

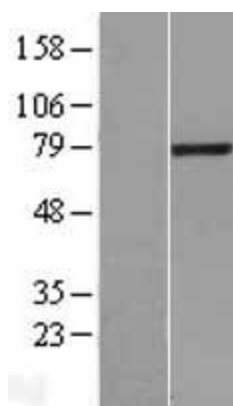
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_014793.5</u>
RefSeq Size:	2860 bp
RefSeq ORF:	2061 bp
Locus ID:	9836
UniProt ID:	<u>O60294</u>
Cytogenetics:	15q15.3
Domains:	LCM
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, Androgen and estrogen metabolism, Cardiac muscle contraction, Histidine metabolism, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease, Selenoamino acid metabolism, Tyrosine metabolism
MW:	75.6 kDa
Gene Summary:	The protein encoded by this intronless gene belongs to the highly variable methyltransferase superfamily. This gene is the inferred homolog of the <i>Saccharomyces cerevisiae</i> carboxymethyltransferase gene PPM2 that is essential for the synthesis of the hypermodified guanosine Wybutosine (yW). [provided by RefSeq, Jul 2008]

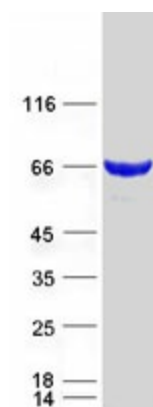
Product images:



Circular map for RC202227



Western blot validation of overexpression lysate (Cat# [LY415004]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202227 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LCMT2 protein (Cat# [TP302227]). The protein was produced from HEK293T cells transfected with LCMT2 cDNA clone (Cat# RC202227) using MegaTran 2.0 (Cat# [TT210002]).