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 RC202041

LYRM1 (NM_020424) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LYRM1 (NM_020424) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LYRM1
Synonyms:	A211C6.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC202041 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACAACGGCAACACGACAAGAAGTCCTTGGCCTCTACCGCAGCATTTTCAGGCTTGCGAGGAAATGGC
AGGCGACATCAGGGCAGATGGAAGACACCATCAAAGAAAAACAGTACATACTAAATGAAGCCAGAACGCT
GTTCCGGAAAAACAAAAATCTCACGGACACAGACCTAATTAAACAGTGTATAGATGAATGCACAGCCAGG
ATTGAAATTGGACTGCATTACAAGATTCCTTACCCAAGGCCAATTCATCTGCCTCCAATGGGCCTTACCC
CACTCCGAGGCCGGGGACTTCGAAGCCAAGAGAAACTGAGGAAACTTTCCAAACCAGTATATCTCAGATC
TCATGATGAAGTTTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202041 protein sequence
Red=Cloning site Green=Tags(s)

MTTATRQEVLGLYRSIFRLARKWQATSGQMEDTIKEKQYILNEARTLFRKNKNLTDTDLIKQCIDECTAR
IEIGLHYKIPYPRPIHLPPMGLTPLRGRGLRSQEKLRKLSKPVYLRSHDEVS

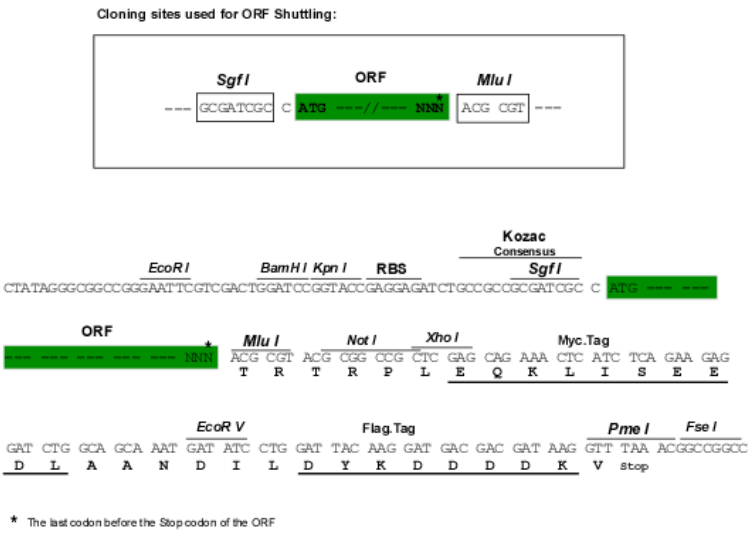
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6539_f08.zip

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_020424

ORF Size: 366 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_020424.5

RefSeq Size: 1589 bp

RefSeq ORF: 369 bp

Locus ID: 57149

UniProt ID: O43325

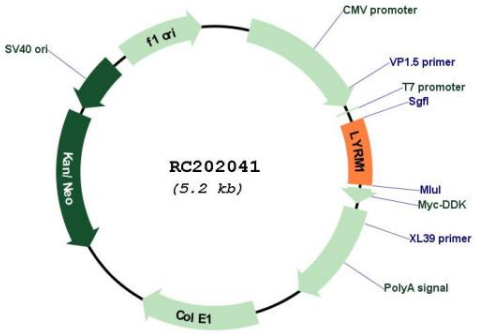
Cytogenetics: 16p12.3

Domains: Complex1_LYR

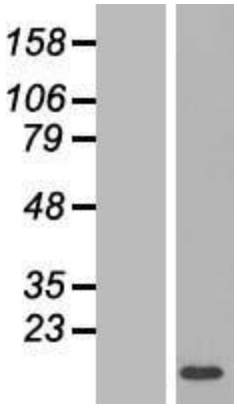
MW: 14.3 kDa

Gene Summary: The protein encoded by this gene belongs to the mitochondrial leucine/tyrosine/arginine motif family of proteins. Proteins of this family are short polypeptides that contain a leucine/tyrosine/arginine motif near the N-terminus. This gene is widely expressed with high levels in omental adipose tissue of obese individuals. In adipose tissue, the protein is localized to the nucleus where it promotes preadipocyte proliferation and lowers the rate of apoptosis to regulate adipose tissue homeostasis. Overexpression of this gene in adipocytes causes abnormal mitochondrial morphology and mitochondrial dysfunction. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]

Product images:



Circular map for RC202041



Western blot validation of overexpression lysate (Cat# [LY426941]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225067] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).