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 RC200288

LSM1 (NM_014462) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LSM1 (NM_014462) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LSM1
Synonyms:	CASM; YJL124C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200288 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAACTATATGCCTGGCACCGCCAGCCTCATCGAGGACATTGACAAAAAGCACTTGGTTCTGCTTCGAG
ATGGAAGGACACTTATAGGCTTTTTAAGAAGCATTGATCAATTTGCAAACTTAGTGCTACATCAGACTGT
GGAGCGTATTCATGTGGGCAAAAAATACGGTGATATTCCTCGAGGGATTTTTGTGGTCAGAGGAGAAAAT
GTGGTCCTACTAGGAGAAATAGACTTGGAAAAGGAGAGTGACACACCCCTCCAGCAAGTATCCATTGAAG
AAATTCTAGAAGAACAAAGGGTGGAACAGCAGACCAAGCTGGAAGCAGAGAAGTTGAAAGTGCAGGCCCT
GAAGGACCGAGGTCTTTCCATTCCTCGAGCAGATACTCTTGATGAGTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200288 protein sequence
Red=Cloning site Green=Tags(s)

MNYMPGTASLIEDIDKKHLVLLRDGRTLIGFLRSIDQFANLVLHQTVERIHVGKKYGDIPRGIFVVRGEN
VVLLGEIDLEKESDTPLQQVSIEEILEEQRVEQQTKLEAEKLKVQALKDRGLSIPRADTLDEY

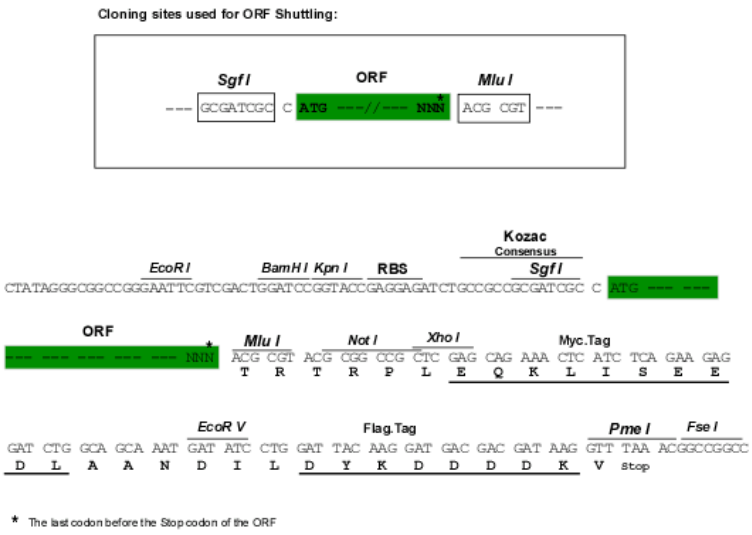
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6388_c09.zip

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_014462

ORF Size: 399 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.

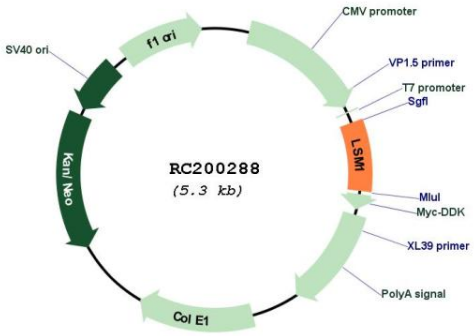
RefSeq: NM_014462.3

RefSeq Size: 1161 bp

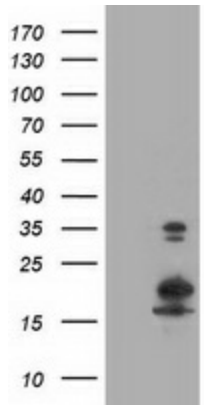
RefSeq ORF: 402 bp

Locus ID:	27257
UniProt ID:	O15116
Cytogenetics:	8p11.23
Protein Families:	Stem cell - Pluripotency
Protein Pathways:	RNA degradation
MW:	15.2 kDa
Gene Summary:	This gene encodes a member of the LSm family of RNA-binding proteins. LSm proteins form stable heteromers that bind specifically to the 3'-terminal oligo(U) tract of U6 snRNA and may play a role in pre-mRNA splicing by mediating U4/U6 snRNP formation. Increased expression of this gene may play a role in cellular transformation and the progression of several malignancies including lung cancer, mesothelioma and breast cancer. Alternatively spliced transcript variants have been observed for this gene, and a pseudogene of this gene is located on the short arm of chromosome 9. [provided by RefSeq, Nov 2011]

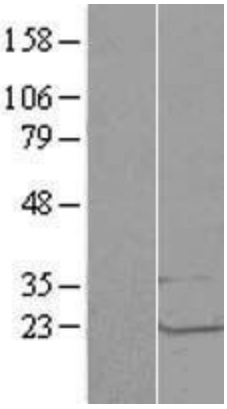
Product images:



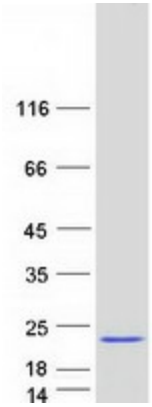
Circular map for RC200288



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LSM1 (Cat# RC200288, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LSM1(Cat# [TA503120]). Positive lysates [LY415265] (100ug) and [LC415265] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415265]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200288 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LSM1 protein (Cat# [TP300288]). The protein was produced from HEK293T cells transfected with LSM1 cDNA clone (Cat# RC200288) using MegaTran 2.0 (Cat# [TT210002]).