

Product datasheet for RC200309

Legumain (LGMN) (NM_001008530) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Legumain (LGMN) (NM_001008530) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LGMN
Synonyms:	AEP; LGMN1; PRSC1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC200309 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTGGAAAGTAGCTGTATTCCTCAGTGTGGCCCTGGGCATTGGTGCCATTCCTATAGATGATCCTG
AAGATGGAGGCAAGCACTGGGTGGTATCGTGGCAGGTTCAAATGGCTGGTATAATTATAGGCACCAGGC
AGACGCGTGCCATGCCTACCAGATCATTACCGCAATGGGATTCCTGACGAACAGATCGTTGTGATGATG
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GTGTTCAATTTACTTCACTGACCATGGATCTACTGGAATACTGGTTTTTCCCAATGAAGATCTTCATGTAA
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AGCCTGTGAGTCTGGGTCCATGATGAACCACCTGCCGGATAACATCAATGTTTATGCAACTACTGCTGCC
AACCCACAGAGATCGTCTACGCCTGTTACTATGATGAGAAGAGGTCCACGTACCTGGGGACTGGTACA
GCGTCAACTGGATGGAAGACTCGGACGTGGAAGATCTGACTAAAGAGACCCTGCACAAGCAGTACCACCT
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CGGGGCACAGTCTACCCAGAGGCCCTGCTGCACTTCGGAGCCCACTGCTTCAACTGGCACTCCCCAC
GTACGAGTATGCGTTGAGACATTTGTACGTGCTGGTCAACCTTTGTGAGAAGCCGTATCCACTTCACAGG
ATAAAATGTCCATGGACCACGTGTGCCTTGCTCACTAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC200309 protein sequence
 Red=Cloning site Green=Tags(s)

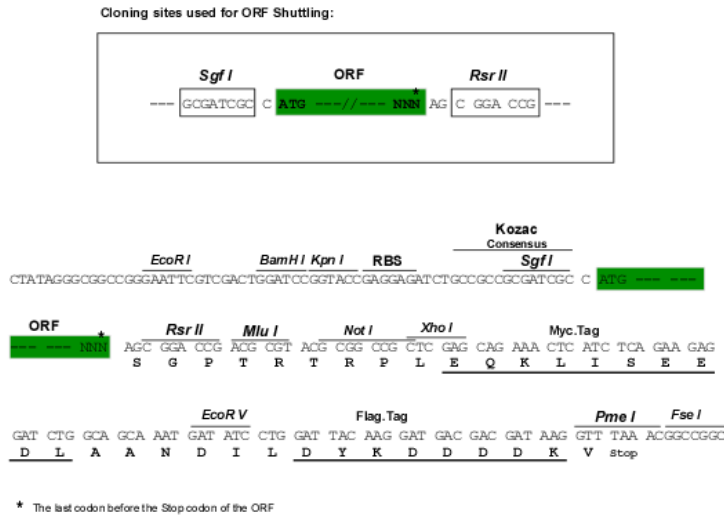
MVWKVAVFLSVALGIGAIPIDDPEDGGKHVVIVAGSNGWYNR HQADACHAYQIIHRNGIPDEQIVVMM
 YDDIAYSEDNPTPGIVINRPNGTDVYQGVPKDYTGEDVTPQNFLAVLRGDAEAVKIGSGKVLKSGPQDH
 VFIYFTDHGSTGILVFPNEDLHVKDLNETIHYMYKHKMYRKMVFYIEACESGSMNHLPDNINVYATTA
 NPRESSYACYDEKRSTYLGDWYSVNW MEDSDVDELTKETLHKQYHLVKSHNTNTSHVMQYGNKTISTMKV
 MQFQGMKRKASSPVPLPPVTHL DLTPSPDVPLTIMKRKLMNTNDLEESRQLTEEIQRHL DARHLIEKSVR
 KIVSLLAASEAEVEQLL SERAPLTGHSCYPEALLHFRTHCFNWHSPTYEYALRHLVYLVNLCCKPYPLHR
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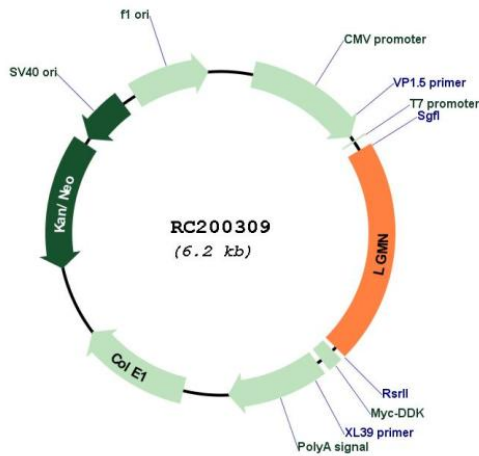
Chromatograms: https://cdn.origene.com/chromatograms/mk6186_d04.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

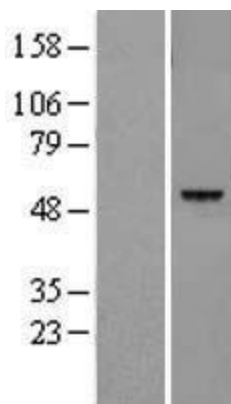


Plasmid Map:



ACCN:	NM_001008530
ORF Size:	1299 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.
RefSeq:	NM_001008530.3
RefSeq Size:	2191 bp
RefSeq ORF:	1302 bp
Locus ID:	5641
UniProt ID:	Q99538 , Q53XC6
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Antigen processing and presentation, Lysosome
MW:	49.4 kDa
Gene Summary:	This gene encodes a cysteine protease that has a strict specificity for hydrolysis of asparaginyl bonds. This enzyme may be involved in the processing of bacterial peptides and endogenous proteins for MHC class II presentation in the lysosomal/endosomal systems. Enzyme activation is triggered by acidic pH and appears to be autocatalytic. Protein expression occurs after monocytes differentiate into dendritic cells. A fully mature, active enzyme is produced following lipopolysaccharide expression in mature dendritic cells. Overexpression of this gene may be associated with the majority of solid tumor types. This gene has a pseudogene on chromosome 13. Several alternatively spliced transcript variants have been described, but the biological validity of only two has been determined. These two variants encode the same isoform. [provided by RefSeq, Jul 2008]

Product images:



Western blot validation of overexpression lysate (Cat# [LY400393]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200309 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).