

## Product datasheet for RC201637

### Lysosomal acid lipase (LIPA) (NM\_000235) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Lysosomal acid lipase (LIPA) (NM_000235) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lysosomal acid lipase
Synonyms:	CESD; LAL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201637 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAATGCGGTTCTTGGGTTGGTGGTCTGTTTGGTTCTCTGGCCCTGCATTCTGAGGGTCTGGAG  
GAAACTGACAGCTTTGGATCCTGAAACAACATGAATGTGAGTGAATTATCTTACTGGGATTCCC  
TAGTGAGGAATACCTAGTTGAGACAGAAGATGGATATATCTGTGCCTTAACCGAATTCCTCATGGGAGG  
AAGAACCATTCTGACAAAGGTCCCAACCAGTTGTCTTCTGCAACATGGCTTGCTGGCAGATTCTAGTA  
ACTGGGTCAAAACCTTGCCAACAGCAGCCTGGGCTTCATTCTTGCTGATGCTGGTTTTGACGTGTGGAT  
GGCAACAGCAGAGGAAATACCTGGTCTCGGAAACATAAGACACTCTCAGTTTCTCAGGATGAATTCTGG  
GCTTTCAGTTATGATGAGATGGCAAAATATGACCTACCAGCTTCCATTAACCTTATTCTGAATAAACTG  
GCCAAGAACAAGTGATTTATGTGGGTCACTTCTCAAGGCACCACTATAGGTTTTATAGCATTTTCACAGAT  
CCCTGAGCTGGCTAAAAGGATTAATGTTTTTGGCCCTGGTCTGTGGCTTCCGTCGCTTCTGTACT  
AGCCCTATGGCCAAATTAGGACGATTACCAGATCATCTCATTAAAGGACTTATTTGGAGACAAAGAATTC  
TCCCCAGAGTGCCTTTTGAAGTGGCTGGGTACCCACGTTTGCCTCATGTCATACTGAAGGAGCTCTG  
TGGAAATCTCTGTTTTCTCTGTGTGGATTTAATGAGAGAAATTTAAATATGTCTAGAGTGGATGATAT  
ACAACACATTCTCTGCTGGAACCTCTGTGCAAAACATGTTACACTGGAGCCAGGCTGTTAAATCCAAA  
AGTTTTCAAGCCTTTGACTGGGGAAGCAGTGCCAAGAATTTTTCATTACAACCAGAGTTATCCTCCAC  
ATACAATGTGAAGGACATGCTTGTGCCGACTGCAGTCTGGAGCGGGGTACGACTGGCTTGCAGATGTC  
TACGACGTCAATATCTTACTGACTCAGATCACCAACTGGTGTCCATGAGAGCATTCCGGAATGGGAGC  
ATCTTGACTTCATTTGGGCCTGGATGCCCTTGGAGGCTTTATAATAAAATTATTAATCTAATGAGGAA  
ATATCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC201637 protein sequence  
 Red=Cloning site Green=Tags(s)

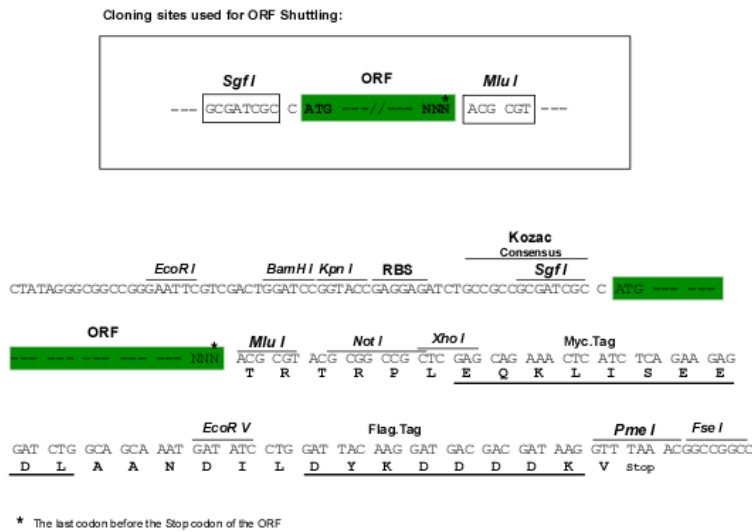
MKMRFLGLVVCLVLWPLHSEGSGGKLTALDPETNMNVSEIISYWGFPSEEYLVEDEDGYILCLNRI PHGR  
 KNHSDKGPKPVVFLQHLLADSSNWVTNLANSSLGFILADAGFDVWMGNSRGNTWSRKHKTL SVSQDEFW  
 AFSYDEMAKYDLPASINFILNKTGQEQVYVGHSGQTTIGFIAFSQIPELAKRIKMFFALGPVASVAFCT  
 SPMAKLGRLPDHLIKDLFGDKEFLPQSAFLKWLGTHVCTHVILKELCGNLCFLLCGFNERNLNMSRVDVY  
 TTHSPAGTSVQNMLHWSQAVKFQKFQAFDWGSSAKNYFHYNQSYPPPTYNVKDMLVPTAVWSGGHDWLADY  
 YDYNILLTQITNLV FHESIPEWEHLDFIWGLDAPWRLYNKIINLMRKYQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6523\\_e08.zip](https://cdn.origene.com/chromatograms/mk6523_e08.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_000235

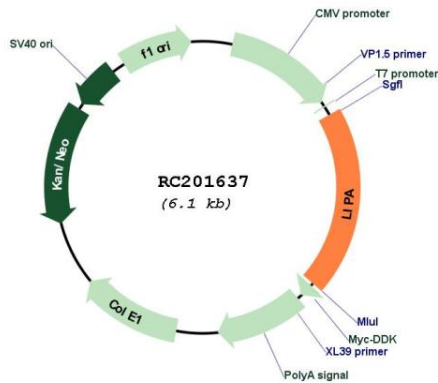
ORF Size: 1197 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

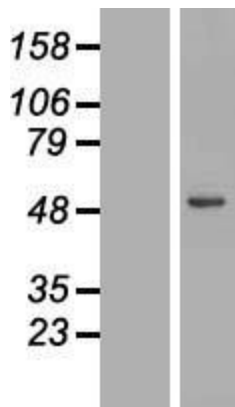
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_000235.4</a>
<b>RefSeq Size:</b>	2775 bp
<b>RefSeq ORF:</b>	1200 bp
<b>Locus ID:</b>	3988
<b>UniProt ID:</b>	<a href="#">P38571</a>
<b>Cytogenetics:</b>	10q23.31
<b>Domains:</b>	abhydrolase, abhydro_lipase
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Lysosome, Steroid biosynthesis
<b>MW:</b>	45.4 kDa
<b>Gene Summary:</b>	This gene encodes lipase A, the lysosomal acid lipase (also known as cholesterol ester hydrolase). This enzyme functions in the lysosome to catalyze the hydrolysis of cholesteryl esters and triglycerides. Mutations in this gene can result in Wolman disease and cholesteryl ester storage disease. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jan 2014]

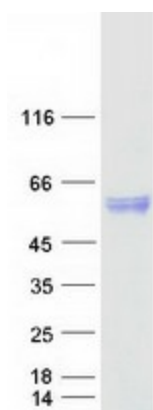
Product images:



Circular map for RC201637



Western blot validation of overexpression lysate (Cat# [LY426820]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225622] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LIPA protein (Cat# [TP301637]). The protein was produced from HEK293T cells transfected with LIPA cDNA clone (Cat# RC201637) using MegaTran 2.0 (Cat# [TT210002]).