

## Product datasheet for RC224931

### LACTB (NM\_171846) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LACTB (NM_171846) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LACTB
Synonyms:	G24; MRPL56
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224931 representing NM_171846 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTACCGGCTCATGTCAGCAGTGACTGCCGGGCTGCCGCCCCGGGGCTTGGCCTCAAGCTGCGGAC  
GACGCGGGTCCATCAGCGCGCCGGGCTGCCGCTCTCGCCACGGTGGGTGGGGGCCCGGGCTGGG  
GCTGGGGTGGCGCTCGGGTGAAGCTGGCAGTGGGCTGAGGGCGCGGCCCGCGCAGTCCCCCGG  
GCCCCGACCCTGAGGCGTCGCTCTGGCCGAGCCGCACAGGAGCAGTCCCTCGCCCCGTGGTCTCCG  
AGACCCGGCGCCGCTGCTCCAGGTGCTTCGCCAGAGCCATCGAGAGCAGCCGCGACCTGCTGCACAG  
GATCAAGGATGAGGTGGGCGCACCGGCATAGTGGTTGGAGTTTCTGTAGATGAAAAGAAGTCTGGTCA  
GAAGGTTTAGGTTATGCTGATGTTGAGAACCGTGTACCATGTAAACCAGAGACAGTTATGCGAATTGCTA  
GCATCAGCAAAAGTCTCACCATGGTTGCTCTTGCCAAATTGTGGGAAGCAGGAAACTGGATCTTGATAT  
TCCAGTACAACATTATGTTCCGAATCCAGAAAAAGAATATGAAGGTGAAAAGTTTCTGTCACAACA  
AGATTACTGATTTCCATTTAAGTGAAATTCGTCATTATGAAAAGGACATAAAAAAGGTGAAAGAAGAGA  
AAGCTTATAAAGCCTTGAAGATGATGAAAGAGAATGTTGCATTTGAGCAAGAAAAAGAAGGCAAAAGTAA  
TGAAAAGAATGATTTACTAAATTTAAACAGAGCAGGAGAATGAAGCCAAATGCCGGAATCAAAACCT  
GGCAAGAAAAAGAATGATTTTGAACAAGGCAATTATATTTGAGAGAAAAGTTTAAAATCAATTGAAT  
CCCTAAGATTATTTAAAAATGATCCTTTGTTCTTCAAACCTGGTAGTCAGTTTTTGTATTCAACTTTGG  
CTATACCTACTGGCAGCCATAGTAGAGAGAGTTCAGGATGTAATATTTGGACTATATGCAGAAAATA  
TTCATGACTTGGATATGCTGACGACTGTGCAGGAAGAAAACGAGCCAGTGATTTACAATAGAGCAAGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC224931 representing NM\_171846  
 Red=Cloning site Green=Tags(s)

MYRLMSAVTARAAAPGGLASSCGRRGVHQ RAGLPPLGHGWVGGGLGLGLLALGVKLAGGLRGAAPAQSPA  
 APDPEASPLAEPPEQSLAPWSPQTPAPPCSRCFARAISSRDLLHRIKDEVGAPGIVVGVSVDGKEVWS  
 EGLGYADVENRVPCKPETVMRIASISKSLTMVALAKLWEAGKLDLDIPVQHVVPEFPEKEYEGEKVSVTT  
 RLLISHLSGIRHYEKDIKKVKEEKAYKALKMMKENVAFEQEKEGKSNEKNDFTKFKTEQENEAKCRNSKP  
 GKKNDFEQGELYLREKFENSIESLRLFKNDPLFFKPGSQFLYSTFGYTLAAIVERASGCKYLDYMQKI  
 FHDLDM LTTVQEENEPVIYNRAR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_171846

**ORF Size:** 1119 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\\_171846.4](#)

**RefSeq Size:** 1388 bp

**RefSeq ORF:** 1122 bp

**Locus ID:** 114294

**UniProt ID:** [P83111](#)

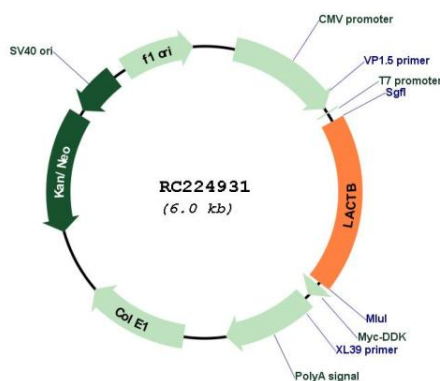
**Cytogenetics:** 15q22.2

**Protein Families:** Protease

**MW:** 41.1 kDa

**Gene Summary:** This gene encodes a mitochondrially-localized protein that has sequence similarity to prokaryotic beta-lactamases. Many of the residues responsible for beta-lactamase activity are not conserved in this protein, suggesting it may have a different enzymatic function. Increased expression of the related mouse gene was found to be associated with obesity. Alternative splicing results in multiple transcript variants encoding different protein isoforms. [provided by RefSeq, Dec 2013]

## Product images:



Circular map for RC224931