

Product datasheet for RC201465

LACTB2 (NM_016027) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | LACTB2 (NM_016027) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | LACTB2 |
| Synonyms: | CGI-83 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC201465 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCTGACTGCAGCGCTCGAGCGGCTGTCCAATCGAGTCGTGCGTGTGTTGGGCTGTAACCCGG
GTCCCATGACCCTCCAAGGCACCAACACCTACCTAGTGGGGACCGGCCCCAGGAGAATCCTCATTGACAC
TGGAGAACCAGCAATCCAGAATACATCAGCTGTTTAAAGCAGGCTCTAACTGAATTTAACACAGCAATC
CAGGAAATTGTAGTGACTCACTGGCACCAGATCATTCTGGAGGCATAGGAGATATTTGAAAAGCATCA
ATAATGACTACCTATTGCATTAATAAACTCCCACGGAATCCTCAGAGAGAAGAAATATAGGAAATGG
AGAGCAACAATATGTTTATCTGAAAGATGGAGATGTGATTAAGACTGAGGGAGCCACTCTAAGAGTTCTA
TATACCCCTGGCCACACTGATGATCACATGGCTCTACTCTTGAAGAGGAAAAATGCTATCTTTTCTGGAG
ATTGCATCCTAGGGGAAGGAACAACGGTATTTGAAGACCTCTATGATTATATGAACCTCTTTAAAAGAGTT
ATTGAAAATCAAAGCTGATATTATATCCAGGACATGGCCAGTAATTCATAATGCTGAAGCTAAAATT
CAACAATACATTTCTCACAGAAATATTCGAGAGCAGCAAATCTTACATTATTTCTGTGAGAACTTTGAGA
AATCATTTACAGTAATGGAGCTTGTAATAATTTACAAGAATACTCCTGAGAATTTACATGAAATGGC
TAAACATAATCTTACTTCATTTGAAAAAAGTAAAGGAAAAATTTAGCAACACAGATCCT
GACAAGAAATGGAAAGCTCATCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201465 protein sequence
Red=Cloning site Green=Tags(s)

MAAVLQRVERLSNRVVRVLCNPGPMTLQGTNTYLVTGPRRILIDTGEPAIPEYISCLKQALTEFNIAI
 QEIVVTHWRDHSGGIGDICKSINNDTTYCIKKLPRNPQREEIIGNGEQQYVYLKGDVVIKTEGATLRVL
 YTPGHTDDHMALLEEENAIIFSGDCILGEGTTVFEDLYDMNSLKELLKIKADIIYPGHGPVIHNAEAKI
 QQYISHRNIREQQILTLFRENFEKSFYVMELVKIIYKNTPENLHEMAKHLLLLHLKKLEKEGKIFSNTDP
 DKKWKAHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6301_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016027

ORF Size: 864 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_016027.3](#)

RefSeq Size: 1553 bp

RefSeq ORF: 867 bp

Locus ID: 51110

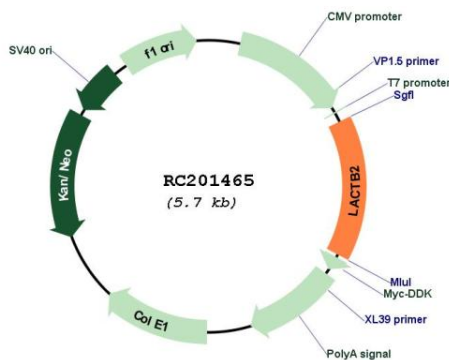
UniProt ID: [Q53H82](#)

Cytogenetics: 8q13.3

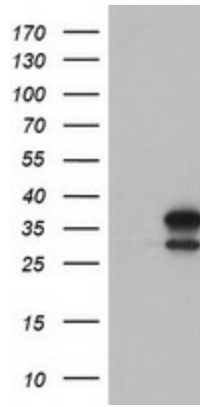
MW: 32.8 kDa

Gene Summary: Endoribonuclease; cleaves preferentially 3' to purine-pyrimidine dinucleotide motifs in single-stranded RNA. The cleavage product contains a free 3' -OH group. Has no activity with double-stranded RNA or DNA. Required for normal mitochondrial function and cell viability. [UniProtKB/Swiss-Prot Function]

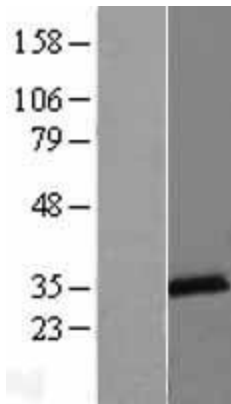
Product images:



Circular map for RC201465



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LACTB2 (Cat# RC201465, 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-LACTB2(Cat# [TA502586]). Positive lysates [LY414237] (100ug) and [LC414237] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414237]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201465 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).