

Product datasheet for **RC201629**

Beclin 1 (BECN1) (NM_003766) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Beclin 1 (BECN1) (NM_003766) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Beclin 1 |
| Synonyms: | ATG6; beclin1; VPS30 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RC201629 representing NM_003766
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAAGGGTCTAAGACGTCCAACAACAGCACCATGCAGGTGAGCTTCGTGTGCCAGCGCTGCAGCCAGC
 CCCTGAAACTGGACACGAGTTTCAAGATCCTGGACCGTGTACCATCCAGGAACTCACAGCTCCATTACT
 TACCACAGCCCAGGCGAAACCAGGAGAGACCCAGGAGGAAGAGACTAACTCAGGAGAGGAGCCATTTATT
 GAAACTCCTCGCCAGGATGGTGTCTCTCGCAGATTATCCCCCAGCCAGGATGATGTCCACAGAAAAGTG
 CCAACAGCTTCACTCTGATTGGGGAGGCATCTGATGGCGCACCATGGAGAACCTCAGCCGAAGACTGAA
 GGTCACTGGGGACCTTTTTGACATCATGTGGGCCAGACAGATGTGGATCACCCACTCTGTGAGGAATGC
 ACAGATACTCTTTAGACCAGCTGGACACTCAGCTCAACGTCCTGAAAATGAGTGTGAGAACTACAAAC
 GCTGTTTGGAGATCTTAGAGCAAATGAATGAGGATGACAGTGAACAGTTACAGATGGAGCTAAAGGAGCT
 GGCCTAGAGGAGGAGAGCTGATCCAGGAGCTGGAAGACGTGGAAAAGAACCAGCAAGATAGTGGCAGAA
 AATCTCGAGAAGGTCCAGGCTGAGGCTGAGAGACTGGATCAGGAGGAAGCTCAGTATCAGAGAGAATACA
 GTGAATTTAAACGACAGCAGCTGGAGCTGGATGATGAGCTGAAGAGTGTGAAAACCCAGATGCGTTATGC
 CCAGACGCAGCTGGATAAGCTGAAGAAAACCAACGCTCTTAATGCAACCTTCCACATCTGGCACAGTGG
 CAGTTTGGCACAATCAATAACTTCAGGCTGGTTCGCTGCCAGTGTCCCGTGGAAATGGAATGAGATTA
 ATGCTGCTGGGGCCAGACTGTGTTGCTGCTCCATGCTCTGGCCAATAAGATGGGTCTGAAATTTAGAG
 ATACCGACTTGTTCCTACGGAAACCATCATATCTGGAGTCTCTGACAGACAAATCTAAGGAGCTGCCG
 TTATACTGTTCTGGGGGTTGCGGTTTTCTGGGACAACAAGTTTGACCATGCAATGGTGGCTTTCTGG
 ACTGTGTGCAGCAGTTCAAAGAAGAGGTTGAGAAAAGCGAGACAGCTTTTTGTCTCCCTACAGGATGGA
 TGTGGAGAAAGCAAGATTGAAGACACAGGAGGCAGTGGCGGCTCCTATTCCATCAAACCCAGTTTAAC
 TCTGAGGAGCAGTGGACAAAAGCTCTCAAGTTCATGCTGACGAATCTTAAGTGGGTCTTCTGGTGTG
 CCTCACAATTTTATAACAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201629 representing NM_003766
 Red=Cloning site Green=Tags(s)

MEGSKTSNNSTMQVSFVCQRCSQPLKLDTSFKILDRVTIQELTAPLLTTAQAKPGETQEEETNSGEEPEFI
 ETPRQDGVSRFFIPPARMMSTESANSFTLIGEASDGGTMENLSRRLKVTGDLFDIMSGQTDVDPHPLCEEC
 TDTLDDQLDQLNVTENECQNYKRCLILEQMNEEDDSEQLQMELKELALEEERL IQELEDVEKNRKIVAE
 NLEKVVQAEERLDQEEAQYQREYSEFKRQQLLDDELKSVENQMRYAQTQLDKLKKTNVFNATFHIWHS
 QFGTINNFRLGRLPSVPVEWNEINAAGQTVLLLHALANKMGLKFQRYRLVPYGNHSYLESLTDKSKELP
 LYCSGGLRFFWDNKFHAMVAFLDCVQFKEEVEKGETRFCLPYRMDVEKGIKIEDTGGSGGSYSIKTQFN
 SEEQWTKALKFMLTNLKWGLAWVSSQFYNK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2569_a01.zip

Restriction Sites:

Sgfl-Mlul

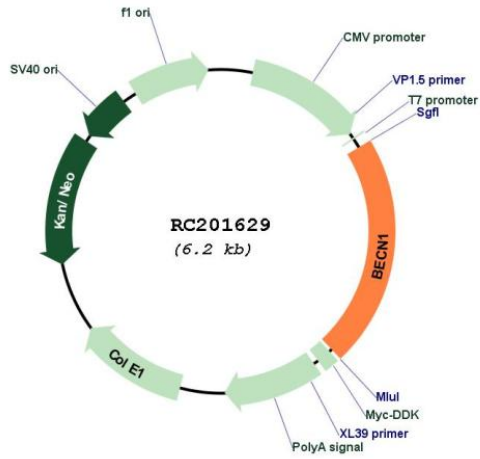
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_003766
 ORF Size: 1350 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 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](#)

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_003766.4](#)

RefSeq Size: 2144 bp

RefSeq ORF: 1353 bp

Locus ID: 8678

UniProt ID: [Q14457](#)

Cytogenetics: 17q21.31

Domains: APG6

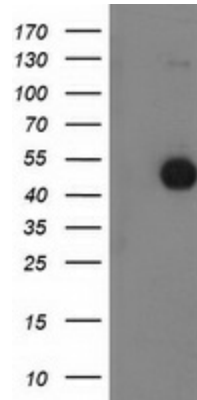
Protein Families: Druggable Genome

Protein Pathways: Regulation of autophagy

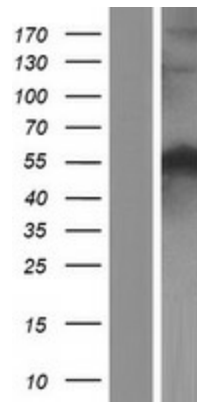
MW: 51.7 kDa

Gene Summary:

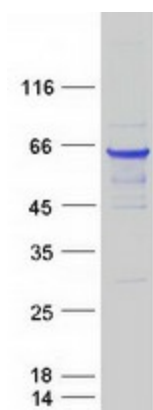
This gene encodes a protein that regulates autophagy, a catabolic process of degradation induced by starvation. The encoded protein is a component of the phosphatidylinositol-3-kinase (PI3K) complex which mediates vesicle-trafficking processes. This protein is thought to play a role in multiple cellular processes, including tumorigenesis, neurodegeneration and apoptosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BECN1 (Cat# RC201629, 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-BECN1 (Cat# [TA502643]). Positive lysates [LY401239] (100ug) and [LC401239] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401239]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201629 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BECN1 protein (Cat# [TP301629]). The protein was produced from HEK293T cells transfected with BECN1 cDNA clone (Cat# RC201629) using MegaTran 2.0 (Cat# [TT210002]).