

## Product datasheet for **RG201629**

### 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:	TurboGFP
Symbol:	Beclin 1
Synonyms:	ATG6; beclin1; VPS30
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG201629 representing NM\_003766  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAAGGGTCTAAGACGTCCAACAACAGCACCATGCAGGTGAGCTTCGTGTGCCAGCGCTGCAGCCAGC  
 CCCTGAAACTGGACACGAGTTTCAAGATCCTGGACCGTGTCAACATCCAGGAACTCACAGCTCCATTACT  
 TACCACAGCCCAGGCGAAACCAGGAGAGACCCAGGAGGAAGAGACTAACTCAGGAGAGGAGCCATTTATT  
 GAAACTCCTCGCCAGGATGGTGTCTCTCGCAGATTATCCCCCAGCCAGGATGATGTCCACAGAAAGTG  
 CCAACAGCTTCACTCTGATTGGGGAGGCATCTGATGGCGCACCATGGAGAACCTCAGCCGAAGACTGAA  
 GGTCACTGGGGACCTTTTTGACATCATGTGGGCCAGACAGATGTGGATCACCCACTCTGTGAGGAATGC  
 ACAGATACTCTTTAGACCAGCTGGACACTCAGCTCAACGTCCTGAAAAAGAGTGTGAGAACTACAAAAC  
 GCTGTTTGGAGATCTTAGAGCAAATGAATGAGGATGACAGTGAACAGTTACAGATGGAGCTAAAGGAGCT  
 GGCCTAGAGGAGGAGAGGCTGATCCAGGAGCTGGAAGACGTGGAAAAGAACCAGCAAGATAGTGGCAGAA  
 AATCTCGAGAAGGTCCAGGCTGAGGCTGAGAGACTGGATCAGGAGGAAGCTCAGTATCAGAGAGAATACA  
 GTGAATTTAAACGACAGCAGCTGGAGCTGGATGATGAGCTGAAGAGTGTGAAAACAGATGCGTTATGC  
 CCAGACGCAGCTGGATAAGCTGAAGAAAACCAACGCTCTTAATGCAACCTTCCACATCTGGCACAGTGG  
 CAGTTTGGCACAATCAATAACTTCAGGCTGGGTGCGCTGCCAGTGTCCCGTGGAAATGGAATGAGATTA  
 ATGCTGCTGGGGCCAGACTGTGTTGCTGCTCCATGCTCTGGCCAATAAGATGGGTCTGAAATTTAGAG  
 ATACCGACTTGTTCCTACGAAACCATCATATCTGGAGTCTCTGACAGACAAATCTAAGGAGCTGCCG  
 TTATACTGTTCTGGGGGTTGCGGTTTTCTGGGACAACAAGTTGACCATGCAATGGTGGCTTTCTG  
 ACTGTGTGCAGCAGTTCAAAGAAGAGTTGAGAAAGCGAGACAGCTTTTTGTCTCCCTACAGGATGGA  
 TGTGGAGAAAGGCAAGATTGAAGACACAGGAGGCAGTGGCGGCTCCTATTCCATCAAACCCAGTTAAC  
 TCTGAGGAGCAGTGGACAAAAGCTCTCAAGTTCATGCTGACGAATCTTAAGTGGGTCTTCTTGGGTG  
 CCTCACAATTTTATAACAAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG201629 representing NM\_003766  
 Red=Cloning site Green=Tags(s)

MEGSKTSNNSTMQVSFVCQRCSQPLKLDTSFKILDRVTIQELTAPLLTTAQAKPGETQEEETNSGEEPF  
 ETPRQDGVSRRIPPARMMSTESANSFTLIGEASDGGTMENLSRRLKVTGDLFDIMSGQTDVDPHPLCEEC  
 TDTLDDQLDQLNVTENECQNYKRCLILEQMNEEDDSEQLQMELKELALEEERL IQELEDVEKNRKIVAE  
 NLEKVVQAEERLDQEEAQYQREYSEFKRQQLDDELKSVENQMRYAQTQLDKLKKTNVFNATFHIWHS  
 QFGTINNFRLGRLPSVPVEWNEINAAWGQTVLLHLHALANKMGLKFQRYRLVPYGNHSYLESLTDKSKELP  
 LYCSGGLRFFWDNKFHAMVAFLDCVQFKEEVEKGETRFCLPYRMDVEKGIEDTGGSGGSYSIKTQFN  
 SEEQWTKALKFMLTNLKWGLAWVSSQFYNK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**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](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](#)

**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

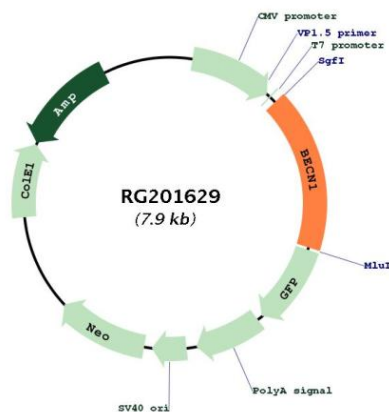
Domains: APG6

Protein Families: Druggable Genome

Protein Pathways: Regulation of autophagy

**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:



Circular map for RG201629