

Product datasheet for **SC324265**

Beclin 1 (BECN1) (NM_003766) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Beclin 1 (BECN1) (NM_003766) Human Untagged Clone
Tag:	Tag Free
Symbol:	Beclin 1
Synonyms:	ATG6; beclin1; VPS30
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_003766.2
 GCTGAAGACAGAGCGATGGTAGTTCTGGAGGCCTCGCTCCGGGGCCGACCCGAGGCCACA
 GTGCCTCCGCGGTAGACCCGACTTGGGTGACGGGCTCCGGGCTCCCGAGGTGAAGAGCAT
 CGGGGGCTGAGGGATGGAAGGTCTAAGACGTCCAACAACAGCACCATGCAGGTGAGCTT
 CGTGTGCCAGCGCTGCAGCCAGCCCTGAAACTGGACACGAGTTTCAAGATCCTGGACCG
 TGTCACCATCCAGAACTCACAGCTCCATTACTTACCACAGCCCAGGCGAAACCAGGAGA
 GACCCAGGAGGAAGAGACTAACTCAGGAGAGGACCATTATTGAAACTCCTCGCCAGGA
 TGGTGTCTCTCGCAGATTCATCCCCCAGCCAGGATGATGTCCACAGAAAGTGCCAACAG
 CTTCACTCTGATTGGGGAGGCATCTGATGGCGGCACCATGGAGAACCCTCAGCCGAAGACT
 GAAGGTCACTGGGGACCTTTTTGACATCATGTCGGGCCAGACAGATGTGGATCACCCACT
 CTGTGAGGAATGCACAGATACTTTTTAGACCAGCTGGACACTCAGCTCAACGTCCTGA
 AAATGAGTGTGAGAACTACAACGCTGTTTGGAGATCTTAGAGCAAAATGAATGAGGATGA
 CAGTGAACAGTTACAGATGGAGCTAAAGGAGCTGGCACTAGAGGAGGAGAGGCTGATCCA
 GGAGCTGGAAGACGTGAAAAAGAACCGCAAGATAGTGGCAGAAAATCTCGAGAAGGTCCA
 GGCTGAGGCTGAGAGACTGGATCAGGAGGAAGCTCAGTATCAGAGAGAATACAGTGAATT
 TAAACGACAGCAGCTGGAGCTGGATGATGAGCTGAAGAGTGTGAAAACAGATGCGTTA
 TGCCACAGCAGCTGGATAAGCTGAAGAAAACCAACGCTTTAATGCAACCTTCCACAT
 CTGGCACAGTGGACAGTTTGGACAATCAATAACTTCAGGCTGGGTGCGCTGCCAGTGT
 TCCCGTGGAAATGGAATGAGATTAATGCTGCTTGGGGCCAGACTGTGTTGCTGCTCCATGC
 TCTGGCCAATAAGATGGGTCTGAAATTTAGAGATACCGACTTGTTCCTTACGAAAACCA
 TTCATATCTGGAGTCTCTGACAGACAACTAAGGAGCTGCCGTTATACTGTTCTGGGGG
 GTTGCGGTTTTCTGGGACAACAAGTTGACCATGCAATGGTGGCTTTCCCTACAGGAT
 GCAGCAGTTCAAAGAAGAGGTTGAGAAAGGCGAGACAGTTTTTGTCTTCCCTACAGGAT
 GGATGTGGAGAAAGCAAGATTGAAGACACAGGAGGCAAGTGGCGGCTCCTATTCCATCAA
 AACCCAGTTTAACTCTGAGGAGCAGTGGACAAAAGCTCTCAAGTTCATGCTGACGAATCT
 TAAGTGGGGTCTTGGTGGTGTCTCACAATTTATAACAAATGACTTTTTTCTTAGG
 GGGAGGTTTGCCTTAAAGGCTTTAATTTTGTGTTTGTGCAAACATGTTTTAAATTA
 TTCGGGTAATATTAACAGTACATGTTTACAATACCAAAAAGAAAAATCCACAAAAGC
 CACTTTATTTAAATATCATGTGACAGATACTTCCAGAGCTACAACATGCCATCTATA
 GTTGCCAGCCCTGGTCAGTTTTGATTCTTAACCCCATGGACTCCTTCCCTTTCTTCTCT
 GAAAAAACTAATTTAAATTTGCTTTTCTTTTTTAACTGAGTTGAATTGAGATTGATG
 TGTTTTCACTGGATTTTTATCTCTCTCAACTTCCTGCACTTAACAATATGAAATAGAAAC
 TTTTGTCTTTACTGAGATGAGGATATGTTTGGATGCACAGTTGGATAATGTGGGAAAAT
 GACATCTAAGCTTTACCTGGTCACCATGTGATGTGATCAGATGCTTGAATTTAACACTT
 TTCACTTGGTTCTTATACTGAATGCCGACTCTGCTCTGTGTTAGAGATATGAAATGGTGT
 TTGATACTGTTTGGAGACATTATGGAGAGATTTAATTTAATTTAATAAAAAGATTTGCTGCA
 GTCTGAAAACGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_003766

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_003766.2](#), [NP_003757.1](#)

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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Variants 1 and 2 encode the same isoform.