

Product datasheet for SC117750

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:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117750 sequence for NM_003766 edited (data generated by NextGen Sequencing)

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ATGGAAGGGTCTAAGACGTCCAACAACAGCACCATGCAGGTGAGCTTCGTGTGCCAGCGC
TGCAGCCAGCCCTGAAACTGGACACGAGTTTCAAGATCCTGGACCGTGTCAACATCCAG
GAACTCACAGCTCCATTACTTACCACAGCCCAGGCGAAACCAGGAGAGACCCAGGAGGAA
GAGACTAACTCAGGAGAGGAGCCATTTATTGAACTCCTCGCCAGGATGGTGTCTCTCGC
AGATTCATCCCCCAGCCAGGATGATGTCCACAGAAAGTGCCAACAGCTTCACTCTGATT
GGGGAGGCATCTGATGGCGGCACCATGGAGAACCTCAGCCGAAGACTGAAGGTCCTGGG
GACCTTTTGGACATCATGTGGGCCAGACAGATGTGGATCACCCACTCTGTGAGGAATGC
ACAGATACTCTTTAGACCAGCTGGACACTCAGCTCAACGTCCTGAAAATGAGTGTGAG
AACTACAACGCTGTTTGGAGATCTTAGAGCAAATGAATGAGGATGACAGTGAACAGTTA
CAGATGGAGCTAAAGGAGCTGGCACTAGAGGAGGAGAGGCTGATCCAGGAGCTGGAAGAC
GTGGAAGAACCAGCAAGATAGTGGCAGAAAATCTCGAGAAGGTCAGGCTGAGGCTGAG
AGACTGGATCAGGAGGAAGCTCAGTATCAGAGAGAATACAGTGAATTTAAACGACAGCAG
CTGGAGCTGGATGATGAGCTGAAGAGTGTGAAAACCAGATGCGTTATGCCAGACGCAG
CTGGATAAGCTGAAGAAAACCAACGCTTTAATGCAACCTCCACATCTGGCACAGTGGAA
CAGTTTGGCACAATCAATAAATTCAGGCTGGGTCGCCTGCCAGTGTCCCGTGGAAATGG
AATGAGATTAATGCTGCTTGGGGCCAGACTGTGTTGCTGCTCCATGCTCTGGCCAATAAG
ATGGGTCTGAAATTTAGAGATACCGACTTGTTCCTTACGGAACCAATTCATATCTGGAG
TCTCTGACAGACAAATCTAAGGAGCTGCCGTTATACTGTTCTGGGGGTTGCGGTTTTTC
TGGGACAACAAGTTTGACCATGCAATGGTGGCTTTCTGGACTGTGTGCAGCAGTTCAAA
GAAGAGGTTGAGAAAGGCGAGACACGTTTTTGTCTCCCTACAGGATGGATGTGGAGAAA
GGCAAGATTGAAGACACAGGAGGAGGCGGCTCCTATTCCATCAAAACCCAGTTTAAC
TCTGAGGAGCAGTGGACAAAAGCTCTCAAGTTCATGCTGACGAATCTTAAGTGGGGTCTT
GCTTGGGTGTCCTACAATTTTATAACAAATGA

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Clone variation with respect to NM_003766.3



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003766 unedited
 AAACAACTTTACTATAGGCGGCCGCGCAATTCGCACGAGGCGGGAAGTCGTTGAAGACA
 GAGCGATGGTAGTTCTGGAGGCCTCGCTCCGGGGCCGACCCGAGGCCACAGTGCCCTCCGC
 GGTAGACCGGACTTGGGTGACGGGCTCCGGGCTCCCGAGGTGAAGAGCATCGGGGGCTGA
 GGGATGGAAGGGTCTAAGACGTCCAACAACAGCACCATGCAGGTGAGCTTCGTGTGCCAG
 CGCTGCAGCCAGCCCCTGAAACTGGACACGAGTTTCAAGATCCTGGACCGTGTCAACCATC
 CAGGAACTCACAGCTCCATTACTTACCACAGCCCAGGCGAAACCCAGGAGAGACCCAGGAG
 GAAGAGACTAACTCAGGAGAGGAGCCATTTATTGAAACTCCTCGCCAGGATGGTGTCTCT
 CGCAGATTCATCCCCCAGCCAGGATGATGTCCACAGAAAGTGCCAACAGCTTCACTCTG
 ATTGGGGAGGCATCTGATGGCGGCACCATGGAGAACCTCAGCCGAAGACTGAAGTCACT
 GGGGACCTTTTTGACATCATGTCCGGCCAGACAGATGTGGATCACCCACTCTGTGAGGAA
 TGCACAGATACTTTTTAGACCAGCTGGACACTCAGCTCAACGTCAGTAAAAATGAGTGT
 CAGAACTACAAACGCTGTTTGGAGATCTTAGAGCAAATGAATGAGGATGACAGTGAACAG
 TTACAGATGGAGCTAAAGGAGCTGGCACTAGAGGAGGAGAGGCTGATCCAGGAGCTGGAA
 GACGTGGAAAAAGAACCCAGATAGTGGCAGAAAATCTCGAGAAGTCCANNNGCTGAGCT
 GANAGACTGGATCANGNAGAAGCTCANTATCAGAGAGAATACAGTGAATTTAAACGACAG
 CAGCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003766 unedited
 CTATGGACCGGCGGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTCAGTTTTCAG
 ACTGCAGCAAATCTTTTATTACAAATAATTAATCTCTCCATAATGTCTCAAACAGTATC
 AAACACCATTTTCATATCTTAACACAGAGCAGAGTCGGCATTAGTATAAGAACCAAGTG
 AAAAGTGTAAATTTCAAGCATCTGATCACATCACATGGTGACCAGGTAAGCTTAGATG
 TCATTTTCCACATTATCCAAGTGTGCATCTCAAACATATCCTCATCTCAGTAAAGACAA
 AAGTTTCTATTTTCATATTGTTAAGTGCAGGAAGTTGAGAGAGATAAAAAATCCAGTGAAAA
 CACATCAATCTCAATCAACTCAGTTAAAAAAAAGAAAAGCAAATTTAAATTAGTTTTTT
 TCAGAGAAGAAAGGAAAGGAGTCCATGGGGTTAAGAATCAAACACTGACCAGGGCTGGCA
 ACTATAGATGGCATGTTGTAGCTCTGGAAGTATCTGTACATGATATTTTAAAAATAAAG
 TGGCTTTTGTGGATTTTTCTTTTTGGTATTGTAACATGACTGTTTAAATATTACCCG
 AATTTAATTTAAACATGTTTGCAAACAAAACAAAATTTAAAGCCTTTAAGGCAAACCT
 CCCCCTAAGGAAAAAAGTCATTTGTTATAAAATTTGTGAGGACACCNAAGCAGACCCAC
 TTAAGATTCGTACAGATGAACCTTGAGAGCTTTTGTCCACTGCTCCTCAGATTAACCTGGG
 TTTTGATGGAATAGACCCGCACTGCCTNCTGTGTCTCAATCTGGCTTTCTNCCATCCATC
 TGTAGGGAGACANAACGTGTCTCGCCTTCTCAACCTCTCTTTGACTGCTGCCACAGTCA
 GAAAGCACATGCAGG

Restriction Sites:

NotI-NotI

ACCN:

NM_003766

Insert Size:

2240 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](#)

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.