

Product datasheet for **MR207162**

Becn1 (NM_019584) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Becn1 (NM_019584) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Becn1
Synonyms:	4921513J16Rik; 5430417M23Rik; Atg6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207162 representing NM_019584
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGGGGTCTAAGGCGTCCAGCAGCACCATGCAGGTGAGCTTCGTGTGCCAGCGCTGTAGCCAGCCTC
 TGAACCTGGACACGAGCTTCAAGATCCTGGACCGGTCACCATCCAGGAACCTCACAGCTCCATTACTTAC
 CACAGCCCAGGCGAAACCAGGAGAGACCCAGGAGGAAGAGGCTAACTCAGGAGAGAGCCATTTATTGAA
 ACTCGCCAGGATGGTGTCTCTCGAAGATTCATCCCCCAGCCAGGATGATGTCTACAGAAAAGTGCTAATA
 GCTTCACTCTGATCGGGGAGGCATCTGATGGTGGCACCATGGAGAACCTCAGCCGGAGACTCAAGGTCAC
 TGGAGACCTGTTTACATCATGTCTGGGCCAGCCGATGTGGATCACCCGCTGTGTGAGGAATGCACAGAC
 ACTCTTTTAGACCAGCTGGACACTCAGCTCAATGTCACTGAGAATGAATGTCAGAACTACAAACGCTGTT
 TGGAGATCCTAGAGCAGATGAATGAGGATGACAGTGAGCAGCTGCAGAGGGAGCTGAAGGAGCTGGCCTT
 GGAGGAGGAGAGGCTGATCCAGGAGCTGGAAGATGTGAAAAGAACCAGGAGGTTGGCAGAGAACCTG
 GAGAAGGTCCAGGCTGAGGCGGAGAGATTGGACCAGGAGGAAGCTCAGTACCAGCGGGAGTATAGTGAGT
 TAAAAGGCAGCAGCTGGAGTTGGATGACGAACCTCAAGAGTGTGGAGAACCAGGTGCGCTACGCCAGAT
 CCAGCTGGACAAGCTCAAGAAAACCAATGTCTTCAATGCCACCTTCCACATCTGGCACAGCGGACAGTTT
 GGCACAATCAATAATTTAGACTGGGTCGCTTGCCAGTGTTCCTGTGGAGTGAATGAAATCAATGCTG
 CCTGGGGCCAGACAGTGTCTGCTCCATGCTTTGGCCAATAAGATGGGTCTGAAGTTTCAGAGGTACCG
 ACTTGTCCCTATGGAATCATTCTATCTGGAGTCTCTGACAGACAAATCTAAGGAGTTGCCGTTATAC
 TGTTCTGGGGTTTTCGGTTTTTCTGGGACAACAAGTTTGACCATGCAATGGTAGCTTTTCTGGACTGTG
 TGCAGCAGTTCAAAGAAGAGGTTGAAAAAGGAGAGACTCGATTTTGTCTCCGTACAGGATGGACGTGGA
 GAAAGGCAAGATTGAAGACACTGGAGCAGTGGCGGCTCCTATTCCATCAAAACCCAGTTTAACTCGGAG
 GAGCAGTGGACAAAAGCGCTCAAGTTCATGCTGACCAATCTCAAGTGGGGTCTTGCTGGGTGCTCTCAC
 AGTTCTATAACAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207162 representing NM_019584
 Red=Cloning site Green=Tags(s)

MEGSKASSTMQVSFVCQRCSQPLKLDTSFKILDRVTIQELTAPLLTTAQAKPGETQEEEEANSGEFPFIE
 TRQDGVSRRFIPPARMMSTESANSFTLIGEASDGGTMENLSRRLKVTGDLFDIMSGQTDVDHPLCEECD
 TLLDQLDTQLNVTENECQNYKRCLILEQMNEEDSEQLQRELKELALEEERLIQELEDVEKNRNVVAENL
 EKVQAEAEERLDQEEAQYQREYSEFKRQQLLELDELKSVENQVRYAQIQLDKLKKTNVFNATFHIWHSQGF
 GTINNFRLGRLPSVPVEWNEINAAGQTVLLLHALANKMGLKFQRYRLVPYGNHSYLES LTDKSKELPLY
 CSGGLRFFWDNKFHAMVAFDCVQQFKEEVEKGETRFCLPYRMDVEKGIEDTGGSGSYSIKTQFNSE
 EQWTKALKFMLTNLKWGLAWSSQFYNK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_019584

ORF Size: 1344 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.

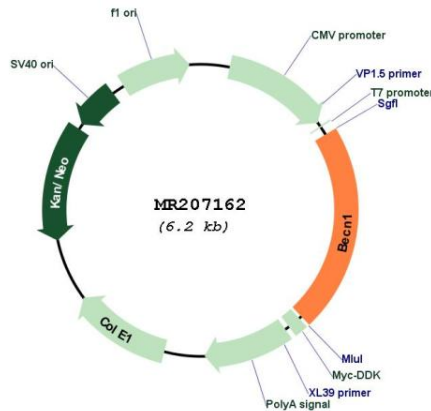
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_019584.4](#)
RefSeq Size: 2031 bp
RefSeq ORF: 1347 bp
Locus ID: 56208
UniProt ID: [O88597](#)
Cytogenetics: 11 D
MW: 52 kDa

Gene Summary: Plays a central role in autophagy (PubMed:10604474, PubMed:12372286, PubMed:19270693, PubMed:28445460). Acts as core subunit of different PI3K complex forms that mediate formation of phosphatidylinositol 3-phosphate and are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis (PubMed:19270693, PubMed:25275521). Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (By similarity). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms (PubMed:25275521). Involved in endocytosis including endosome formation in neuronal cells (PubMed:25275521). May play a role in antiviral host defense (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207162