

Product datasheet for **MC220610**

Casc3 (NM_138660) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Casc3 (NM_138660) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Casc3
Synonyms:	Btz; Mln51
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC220610 representing NM_138660
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGGACCGCGCGCGCAGCGCCTCCAGGACACGGAGGACGAGGAATCCGGGGCTTCGGGTTCCG
 ACAGCGGCTCTCCGGCGCGGGCGCGGCAGCTGCAGCGGGAGCGTCGGAGGCGGCGCAGTGGCTCGCT
 GCCTTCTCAGCGCGCGCGCCGCGCGGGGGCTTCACCTGCGGCGGGTGGAGAGCGGGGGCGCAAGAGC
 GCCGAGGAGTCTGAGTGTGAGAGTGAAGATGGCATGGAAGGAGATGCTGTTCTTTCCGATTATGAAAGTG
 CAGAAGATTCAGAAGGTGAAGAAGACTACAGTGAAGAGGAGAATCCAAGGTGGAGCTGAAATCAGAAGC
 TAACGATGCTGCTGATTCCTCTGCGAAAAGAAAAGGGAGAGGAAAAGCCTGAGTCTAAAGGCACGGTGACT
 GGGGAGAGGCAGAGCGCGATGGCAGGAGAGCACAGAGCCTGTGGAGAACAAGTGGGGAAAAAGGCC
 CTAAGCACTTGGATGACGATGAGGATCGGAAAAACCCAGCCTACATCCCCAGGAAAGGGCTTCTTTTGA
 GCACGATCTTCGAGGACAGACTCAGGAGGAGGAAGTCCGACCCAAGGGACGGCAGCGAAAGCTATGGAAA
 GATGAGGGTTCGCTGGGAACATGATAAGTTCCGTGAGGATGAACAGGCCCGGAAATCTCGGCAGGAGCTAA
 TTGCATTTATGGTTATGACATTCGGTCTGCTCAAACTCCTGATGACATCAAACCCCGAAGAATCCGGAA
 ACCTCGATTTGGAAGTTCACCAAAAGAGATCCAACTGGATTGGTGATCGATCAAGCAATCCCATCGC
 CACCAGGGTCTGGGGCAATCTACCACCTAGGACATTTATTAACAGGAACACGGCAGGACTGGCCGCA
 TGTCTGCATCCAGGAATTAATCTCGATCGGGGGCTTCAAGGATGGCCGCACTAGTTTACGGCTGTGGA
 GGTTGCTGGGCAGCATGGTGGCCGTCTGCTGAGACTCTTAAGCATGAAGCTAGTTACGGTACGGCGT
 CTAGAGCAGACTCCTGTGAGGGATCCATCTCAGAGCCAGATGCTCCATTGCTTGAAGTCTGAGAAAG
 AAGAGTGGCCTCAGAGACGCCAGCTGCTGTACCCGACATCACCCACCAGCTCCTGACAGGCCATTGA
 GAAGAAGTCTATTCCCGGGCAAGAAGGACCAGGACCAAAAGTTGGGGATGCAGTCAAAGCTGCTGAGGAG
 GTTCTCTCCATCTGAAGGGCTGGCCTCAACAGCCACAGTCCCCGAAACGACTCCAGCTGCTAAGACTG
 GAACTGGGAGGCTCCAGTAGACTCTACCACAGGTGGACTTGAGCAAGATGTGGCGCAGTAAATATAGC
 AGAACAAAGTTGGAGTCCAAGCCAGCCTTATTCTTGCAGCCACGGAACTTCGAGGTGTGCCTAACAC
 ATCCACATGGGAGCAGGACCCCCACCTCAGTTAAACCGGATGGAAGAAATGGGCGTCCAGAGTGGTCGAG
 CTAAGCGTTACTCATCCAGCGGCAGAGACCTGTGCCAGAGCCCCCTGCTCCTCTGTGCATATCAGTAT
 CATGGAGGACATTACTATGATCCATTGCAGTTCAGGGACCAATCTATACCCATGGTGACAGCCCTGCC
 CCACTGCCCCACAGGGCATGATCGTACAGCCGAAATGCACCTTCCCCACCCAGGTTTACATCCCACC
 AGTCACCAGGACCTCTGCCAACCCGGGTCTCTACCCACCACAGTGTCCATGTCCCCAGGACAGCCACC
 GCCCCAGCAACTGCTTGCTCCTACCTACTTTTCTGCTCCGGGTGTCATGAATTTGGTAACCCCAATTAC
 CCTTATGCTCCGGGAGCATTGCCACCTCCTCCACCTCCTCATCTGTATCCTAACACGCAGGCTCCACCAC
 AGGTGTATGGAGGAGTGACTTACTATAACCCCGCCAGCAGGTGCAGCCCAAGCCCTCCCCACCCCG
 GAGGACTCCCCAGCCGGTCTCCATCAAGCCCCCCCCACCTGAGGTTGTAAGCAGGGGTTCCAGT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_138660
Insert Size: 2097 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_138660.2](#), [NP_619601.2](#)

RefSeq Size: 3764 bp

RefSeq ORF: 2097 bp

Locus ID: 192160

UniProt ID: [Q8K3W3](#)

Cytogenetics: 11 D

Gene Summary:

Required for pre-mRNA splicing as component of the spliceosome. Core component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junctions on mRNAs. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. The EJC marks the position of the exon-exon junction in the mature mRNA for the gene expression machinery and the core components remain bound to spliced mRNAs throughout all stages of mRNA metabolism thereby influencing downstream processes including nuclear mRNA export, subcellular mRNA localization, translation efficiency and nonsense-mediated mRNA decay (NMD). Stimulates the ATPase and RNA-helicase activities of EIF4A3. Plays a role in the stress response by participating in cytoplasmic stress granules assembly and by favoring cell recovery following stress. Component of the dendritic ribonucleoprotein particles (RNPs) in hippocampal neurons. May play a role in mRNA transport. Binds spliced mRNA in sequence-independent manner, 20-24 nucleotides upstream of mRNA exon-exon junctions. Binds poly(G) and poly(U) RNA homopolymer.[UniProtKB/Swiss-Prot Function]