

## Product datasheet for **MR227449**

### **Bco1 (NM\_001163028) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Bco1 (NM_001163028) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bco1
Synonyms:	Bcd; Bcdo; Bcdo1; Bcmo; Bcmo1; beta-C; beta-CD; betaCM; betaCMOOX; Cm; CMO1; Cmoi
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR227449 representing NM\_001163028  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGATAATATTTGGCCAGAATAAGAAAGAACAGCTGGAGCCAGTTCAGGCCAAAGTGACAGGCAGCA  
 TTCAGCATGGCTGCAGGGGACCCTGCTCCGAAACGGGCCGGGATGCACACAGTGGGAGAGAGCAAGTA  
 CAACCATTGGTTTGATGGCCTGGCCCTTCTCCACAGTTTCTCCATCAGAGATGGGGAGGTCTTCTACAGG  
 AGCAAATACCTGCAGAGTGACACCTACATCGCCAAACATTGAGGCCAACAGAATCGTGGTGTCTGAGTTTCG  
 GAACCATGGCCTACCCGGACCCCTGCAAAAACATCTTTTCCAAAGCTTTCTCTACTTGTCTCACACCAT  
 CCCCAGCTTACAGACAACCTGTCTGATCAACATCATGAAATGTGGAGAAGACTTCTATGCAACCACGGAG  
 ACCAACTACATCAGGAAAATCGACCCCCAGACCCTAGAGACCTTGGAGAAGGTTGATTACCGGAAGTATG  
 TGGCGGTAAACCTGGCTACCTCGCACCCCTATTATGACGAGGCTGGGAATGTCTTAACATGGGCACATC  
 CGTCGTGGACAAAGGGAGGACAAAATACGTGATATTTAAGATCCCTGCCACAGTCCAGACAGCAAGAAG  
 AAAGGGAAGAGTCCCGTGAAGCACGCGGAAGTTTTCTGCTCCATTTCCTCCCGCTCGTTGCTCTCTCCCA  
 GCTACTACCACAGCTTTGGTGTACGGAGAACTATGTGGTGTCTTCTGGAGCAGCCTTTAAAGTTGGATAT  
 CCTCAAGATGGCCACCGCATACATGAGGGGAGTGAGCTGGGCTTCTGTATGTCATTTCGACAGGGAGGAC  
 AAGACATACATTCATATCATCGACCAGAGGACCAGGAAGCCTGTGCCTACCAAGTTCTACACAGATCCCA  
 TGGTGGTCTTCCATCATGTCAATGCCTACGAGGAGGACGGCTGTGTGCTGTTTGTATGTGATCGCCTATGA  
 GGACAGCAGCCTATACAGCTCTTCTACCTGGCCAACCTGAACAAGGACTTCGAGGAGAAGTCCAGGCTG  
 ACCTCAGTGCCTACCCTCAGGAGGTTTGTGTGCCCTCCATGTGGACAAGGATGCAGAAGTGGGCTCAA  
 ATTTAGTCAAGGTGTATCTCAACTGCAACGCCCTGAAGGAGAAGACGGCCATGTCTATTGCCAGCC  
 CGAGTCTCTACGAAGGCCTAGAGCTCCCTCGGATAAATTATGCTTACAACGGGAAGCCATATCGCTAC  
 ATCTTTGCAGCTGAAGTACAGTGGAGTCCAGTCCCAACCAAGATACTGAAATATGACATTCTCACAAAGT  
 CCTCCTTAAAGTGGTCTGAGGAGAGCTGCTGGCCAGCAGAGCCTCTGTTTGTCCACGCCAGGTGCGAA  
 GGATGAAGATGATGTCCCTTGCAGGCCAAGCAGAGACTGTGGAGTCCAAGGGCCCATCGTAAATCACAT  
 TGTGAGCTGAGCATAGCATGTGTGCCTGAGATCTCAGCATTGGGAGGCAGACAGAAGACAATCAGGGGT  
 CTACAGTCATTCTCAGATATACAGAGAATTTGAACTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR227449 representing NM\_001163028  
 Red=Cloning site Green=Tags(s)

MEIIFGQNKKEQLEPVQAKVTGSIPAWLQGTLLRNGPMHTVGESKYNHWF DGLALLHSFSIRDGEV FYR  
 SKYLQSDTYIANIEANRIVVSEFGTMAYDPCKNIFSKAFSYLSHTIPDFDNCLINIMKCGEDFYATTE  
 TNYIRKIDPQTLETLEKVDYRKYYAVNLATSHPHYDEAGNVLNMGTSVVDKGRTKYVIFKIPATVPDSK  
 KGKSPVKHAEVFCSSRSLLSPSYHFSFGVTENYVVFLEQPFKLDILKMATAYMRGVSWSACMSFDRED  
 KTYIHIIDQRTRKPVPTKFYTDPMVVFHHVNA YEEDGCVLFDVIA YEDSSLYQLFYLANLNKDFEESRL  
 TSVPTLRRFAVPLHVDKDAEVGSNLVKVSSTTATALKEKDGHVYCPPEVLYEGLELPRINYANGKPYRY  
 IFAAEVQWSPVPTKILKYDILTKSSLKWEESCWPAEPLFVPTPGAKDEDDVPCRP SRDCGVQGPHRKSH  
 CQLSIACVPEISAFGRQTEDNQSTVILRYTENLNY

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_001163028

**ORF Size:** 1578 bp

**OTI Disclaimer:** 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\\_001163028.1](#), [NP\\_001156500.1](#)

**RefSeq Size:** 2532 bp

**RefSeq ORF:** 1581 bp

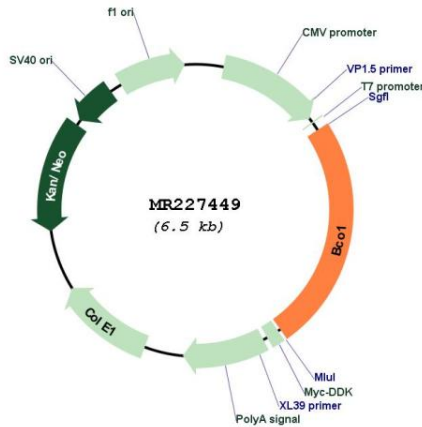
**Locus ID:** 63857

**Cytogenetics:** 8 E1

**MW:** 60.3 kDa

**Gene Summary:** Vitamin A metabolism is important for vital processes such as vision, embryonic development, cell differentiation, and membrane and skin protection. The protein encoded by this gene is a key enzyme in beta-carotene metabolism to vitamin A. It catalyzes the oxidative cleavage of beta,beta-carotene into two retinal molecules. Two alternatively spliced variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2009]

**Product images:**



Circular map for MR227449