

Product datasheet for **RG223790**

BCMO1 (BCO1) (NM_017429) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCMO1 (BCO1) (NM_017429) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BCMO1
Synonyms:	BCDO; BCDO1; BCMO; BCMO1; BCO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG223790 representing NM_017429
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGATATAATATTTGGCAGGAATAGGAAAGAACAGCTGGAGCCTGTGAGGGCCAAAGTGACAGGCAAGA
 TTCAGCATGGCTGCAGGGAACCCTGCTCCGCAACGGCCCTGGGATGCACACAGTTGGGGAGTCCAGATA
 CAACCATTGGTTCGACGGCCTTGCCCTGCTCCACAGCTTCACCATCAGAGACGGTGAAGTCTATTACAGG
 AGCAAATACCTGAGAAGCGATACCTACAACACCAATATTGAGGCAAAACAGGATTGTGGTGTCTGAGTTTG
 GAACAATGGCCTATCCGGACCCCTGCAAAAACATATTTTCCAAAGCTTTCTCTACTTGTCTCACACCAT
 CCCCATTCCACGACAACCTGCCTGATCAACATCATGAAGTGGGAGAAGACTTCTACGCGACCTCAGAG
 ACCAATTACATCAGGAAAATCAACCCACAGACTCTGGAAACCCTGGAGAAGGTTGATTATCGTAAATACG
 TGGCGGTAATCTGGCAACGTACATCCCCATTATGATGAGGCTGAAAATGTTCTAAACATGGGCACATC
 CATTGTGAAAAGGGGAAGACAAAGTATGTGATTTTTAAGATCCCTGCCACAGTACCAGAGGGCAAGAAG
 CAGGGGAAGAGCCCTGGAAGCACACAGAGGTGTTCTGCTCCATCCCATCCCGCTCCCTGCTCTCCCAA
 GCTACTACCACAGCTTTGGAGTACCGAGAACTATGTCATCTTCTTGAGCAGCCTTTCAGGTTGGATAT
 TCTCAAGATGGCAACCGCATACATCCGGAGTATGAGCTGGGCCTCCTGCCTGGCTTTCCACAGGGAGGAG
 AAGACTTATATCCACATCATCGACCAAAGGACCAGGCAGCCTGTGCAGACCAAGTTTTACACAGCGCCA
 TGGTGGTCTTCCATCACGTCAACGCCTACGAAGAGGACGGCTGCATCGTGTGACGTATTGCCTACGA
 GGACAACAGCCTTACCAGCTCTTCTACCTGGCCAACCTGAACCAGGACTTCAAGGAGAAGTCCAGGCTC
 ACCTCGTCCCCACCCTCAGGAGTTTGGCGTCCCTCCACGTGGACAAGAATGCAGAAGTGGGCACAA
 ATTTAATCAAAGTGGCATCTACAACAGCCAGCCCTGAAGGAAGAAGATGGCCAAGTCTACTGCCAGCC
 GGAATTTCTTTATGAAGGCTTAGAGCTTCCACGGTCAATTATGCTCACAATGGAAGCAATACCGATAT
 GTCTTTGTACAGGAGTTCAGTGGAGTCCAATCCAACCAAGATAATAAAATATGACATTCTCACAAAGT
 CATCCTTAAAAATGGAGAGAGGACGACTGCTGGCCAGCGGAACCCCTGTTTGTGCCCGCGCCAGGTGCCAA
 GGATGAGGATGACGGAGTAATCTTATCAGCCATTGTCTCTACTGATCCCCAAAAGCTGCCTTTTCTGCTC
 ATTCTGGATGCCAAAAGCTTTACGGAATTGGCCCGTGCCTCTGTTGATGTCGATATGCACATGGATCTCC
 ATGGATTATTACAGACATGGACTGGGACACAAAAAGCAGGCCGCTTCTGAGGAACAGCGGGACAG
 GGCTTCCGACTGCCACGGGGCTCCTCTGACC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG223790 representing NM_017429
 Red=Cloning site Green=Tags(s)

MDIIFGRNRKEQLEPVRAKVTGKIPAWLQGTLLRNGPMHTVGESRYNHWF DGLALLHSFTIRDGEVYYR
 SKYLRSPTYNTNIEANRIVVSEFGTMAYDPCKNIFSKAFSYLSHTIPDFTDNCLINIMKCGEDFYATSE
 TNYIRKINPQTLETLEKVDYRKYVAVNLATSHPHYDEAGNVLNMGTSIVEKGKTKYVIFKIPATVPEGK
 QGKSPWKHTEVFCSPSRLLSPSYHFSFGVTENYVIFLEQPFRLDILKMATAYIRSMWSASCLAFHREE
 KTYIHIIDQRTRQPVQTKFYTDAMVVFHHVNAYEEDGCI VFDVIAYEDNSLYQLFYLANLNQDFKENSRL
 TSVPTLRRFAVPLHVDKNAEVTNLIKVASTTATALKEEDGQVYCPPEFLYEGLELPRVNYAHNGKQYRY
 VFATGVQWSP IPTKI I KYDILTKSSLKWREDDCWP AEPLFVPAPGAKDEDDGVILSAIVSTDPQKLPFL
 ILDAKSFTE LARASVDVDMHMDLHGLFITDMDWDTKKQAASEEQDRASDCHGAPLT

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_017429

ORF Size: 1641 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_017429.2](#), [NP_059125.2](#)

RefSeq Size: 2446 bp

RefSeq ORF: 1644 bp

Locus ID: 53630

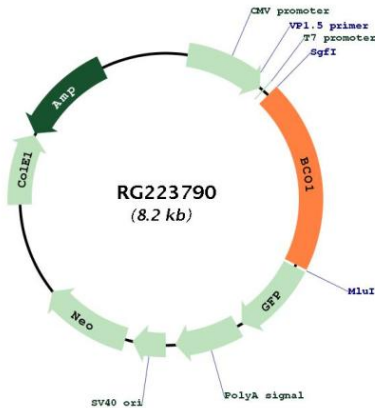
UniProt ID: [Q9HAY6](#)

Cytogenetics: 16q23.2

Protein Pathways: Metabolic pathways, Retinol metabolism

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. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG223790