

Product datasheet for **RG219051**

BCO2 (NM_001037290) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	BCO2
Synonyms:	B-DIOX-II; BCDO2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG219051 representing NM_001037290
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGAAATACTCCTCAGAAAAAGCCGCTTTGGGCAGTGTGGGGTCTGCCATGTGTTGCACCGCTGC
 TGACCACAGTGGAAAGAGGCTCCACGGGGCATCTCTGCTCGAGTCTGGGGACATTTTCCTAAGTGGCTCAA
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 GGGATGGCGCTGCTTCACCACTTCAGAAATGGCAAGGGCAGTGACATACAGGAGCAAGTTTCTACAGA
 GTGATACATATAAGGCCAACAGTGCTAAAAACGAATTGTGATCTCAGAATTTGGCACACTGGCTCTCCC
 GGATCCATGCAAGAATGTTTTGAACGTTTCATGTCCAGTTTGGAGCTGCCTGGTAAAGCTGCAGCCATG
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 CTCGAAGGTTTGTTCCTTTAAATGTCAAGTTGAATGCCCTGAGGGAGACAACCTGAGTCCATTGTC
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 ACCAATGAAGAAGATGGTGGGTTATTCTTTCTGTGGTGATCACTCCCAACCAGAATGAAAGCAATTTTA
 TCCTAGTTTGGATGCCAAGAACTTTGAAGAGCTGGGCCGAGCAGAGGTACCTGTGCAGATGCCTTATGG
 GTTCCATGATACCTTCATACCCATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

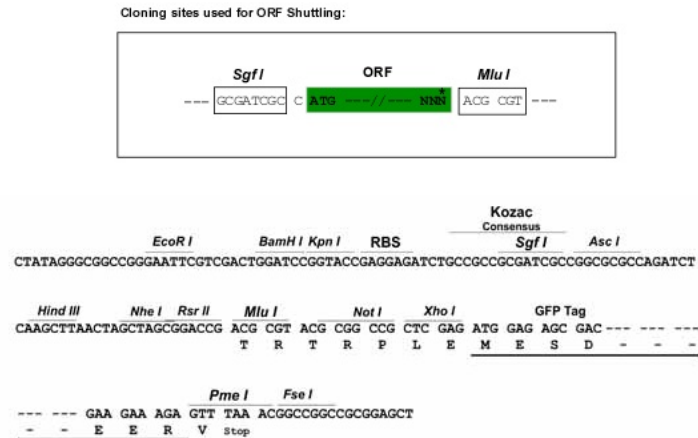
Protein Sequence: >RG219051 representing NM_001037290
 Red=Cloning site Green=Tags(s)

MGNTPOKKAVFGQCRGLPCVAPLLTTVEEAPRGISARVWGHFPGKLNGLLRIGPGKFEFGKDKYNHWF
 GMAALLHQFRMAKGTVTYRSKFLQSDTYKANSKRNIVISEFGTLALPDPCKNVFERFMSRFELPGKAAAM
 TDNTNVNYVRYKGDYLLCTETNFMNKVDIETLEKTEKVDWSKFIAVNGATAHPHYDLDTAYNMGNSFGP
 YGFSYKVIKVPPEKVDLGETIHGVQVICSIASTEKGKPSYYHSFGMTRNYIIFIEQPLKMNWKIATSKI
 RGKAFSDGISWEPQCNTRFHVVEKRTGQLLPGRYYSKPFVTFHQINAFEDQGCVIIDLCCQDNGRTLEVY
 QLQNLRKAGEGLDQVHNSAAKSFPRRFVLPLNVSLNAPEGDNLSPLSYTSASAVKQADGTIWCSHENLHQ
 EDLEKEGGIEFPQIYYDRFSGKKYHFFYGCGRHLVGDSLKVDVNVNKLKVVREDGFYFSEPVPVPAPG
 TNEEDGGVILSVVITPNQNESNFILVLDKNFEELGRAEVPVQMPYGFHGTFIPI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001037290

ORF Size: 1635 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.

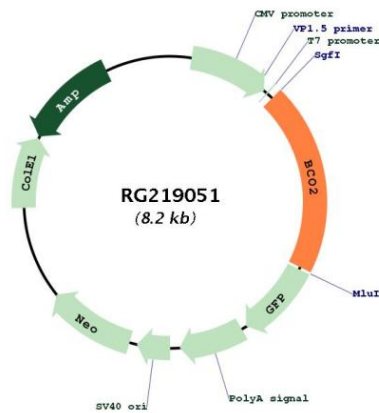
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001037290.3](#)

RefSeq Size: 2813 bp

RefSeq ORF:	1638 bp
Locus ID:	83875
UniProt ID:	Q9BYV7
Cytogenetics:	11q23.1
Gene Summary:	This gene encodes an enzyme which oxidizes carotenoids such as beta-carotene during the biosynthesis of vitamin A. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

Product images:



Circular map for RG219051