

Product datasheet for **RG216701**

Bestrophin 3 (BEST3) (NM_032735) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bestrophin 3 (BEST3) (NM_032735) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BEST3
Synonyms:	VMD2L3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG216701 representing NM_032735
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

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CAGATATCATAGAGCTGAACAAGGAACTGAGGAATCACCCAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG216701 representing NM_032735
 Red=Cloning site Green=Tags(s)

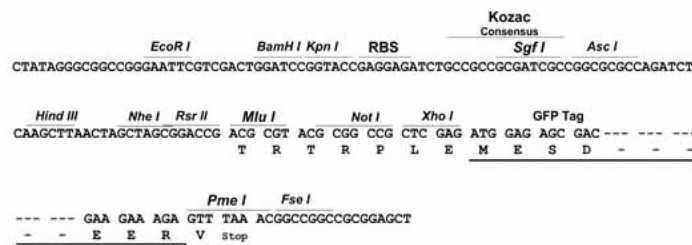
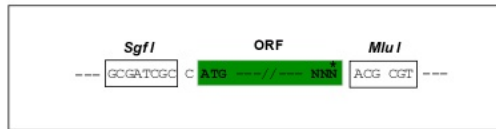
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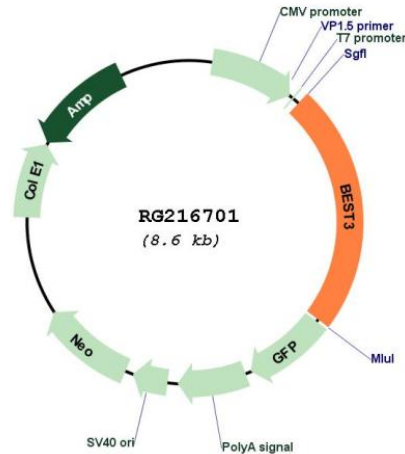
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_032735

ORF Size: 2004 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_032735.3](#)

RefSeq Size: 3552 bp

RefSeq ORF: 2007 bp

Locus ID: 144453

UniProt ID: [Q8N1M1](#)

Cytogenetics: 12q15

Protein Families: Ion Channels: Other, Transmembrane

Gene Summary: BEST3 belongs to the bestrophin family of anion channels, which includes BEST1 (MIM 607854), the gene mutant in vitelliform macular dystrophy (VMD; MIM 153700), and 2 other BEST1-like genes, BEST2 (MIM 607335) and BEST4 (MIM 607336). Bestrophins are transmembrane (TM) proteins that share a homology region containing a high content of aromatic residues, including an invariant arg-phe-pro (RFP) motif. The bestrophin genes share a conserved gene structure, with almost identical sizes of the 8 RFP-TM domain-encoding exons and highly conserved exon-intron boundaries. Each of the 4 bestrophin genes has a unique 3-prime end of variable length (Stohr et al., 2002 [PubMed 12032738]; Tsunenari et al., 2003 [PubMed 12907679]).[supplied by OMIM, Mar 2008]