

## **Product datasheet for RG227442**

#### OriGene Technologies, Inc.

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## Bestrophin (BEST1) (NM\_001139443) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Bestrophin (BEST1) (NM 001139443) Human Tagged ORF Clone

Tag: TurboGFP
Symbol: Bestrophin

Synonyms: ARB; BEST; Best1V1Delta2; BMD; RP50; TU15B; VMD2

Mammalian Cell Neomycin

Selection:

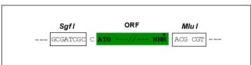
**Vector:** pCMV6-AC-GFP (PS100010)

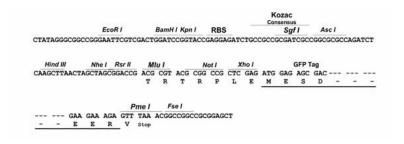
E. coli Selection: Ampicillin (100 ug/mL)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:





**ACCN:** NM\_001139443

ORF Size: 1812 bp



#### Bestrophin (BEST1) (NM\_001139443) Human Tagged ORF Clone - RG227442

**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:** <u>NM 001139443.1, NP 001132915.1</u>

 RefSeq Size:
 2852 bp

 RefSeq ORF:
 1815 bp

 Locus ID:
 7439

 UniProt ID:
 076090

Cytogenetics: 11q12.3

**Protein Families:** Druggable Genome, Ion Channels: Other, Transmembrane

**Gene Summary:** This gene encodes a member of the bestrophin gene family. This small gene family is

characterized by proteins with a highly conserved N-terminus with four to six

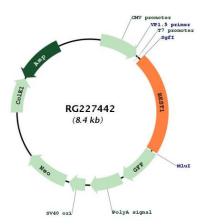
transmembrane domains. Bestrophins may form chloride ion channels or may regulate voltage-gated L-type calcium-ion channels. Bestrophins are generally believed to form calcium-activated chloride-ion channels in epithelial cells but they have also been shown to be highly permeable to bicarbonate ion transport in retinal tissue. Mutations in this gene are responsible for juvenile-onset vitelliform macular dystrophy (VMD2), also known as Best macular dystrophy, in addition to adult-onset vitelliform macular dystrophy (AVMD) and other

retinopathies. Alternative splicing results in multiple variants encoding distinct isoforms.

[provided by RefSeq, Nov 2008]



# **Product images:**



Circular map for RG227442