

## Product datasheet for **SC100666**

### Bestrophin 3 (BEST3) (NM\_152439) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Bestrophin 3 (BEST3) (NM_152439) Human Untagged Clone   |
| Tag:                      | Tag Free  |
| Symbol:                   | Bestrophin 3  |
| Synonyms:                 | VMD2L3  |
| Mammalian Cell Selection: | None  |
| Vector:                   | <u>pCMV6-XL5</u>  |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| Fully Sequenced ORF:      | >NCBI ORF sequence for NM_152439, the custom clone sequence may differ by one or more nucleotides |

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ATGACAACAGATGAAAGGAAATTATTCAACCACCTCAAGTCTCCTCATCTGAAATATTGGGTTCCATTCA
TCTGGTTTGGAAATCTTGCAACTAAAGCCCGGAATGAAGGTAGAATCAGAGACAGTGTTGATCTGCAATC
ATTGATGACTGAAATGAATCGATACCGCTCTTGGTGCAGCCTTATTTCGGTTATGACTGGGTTGGGATT
CCGCTGGTTTACACCCAGGTAGCAGAGCAGCTTATCAACCCTTTGGAGAAGATGATGATGATTTTGAAA
CTAACTGGTGCATTGACAGAAATTTGCAGGTCTCTTTTAGCTGTGGACGAAATGCACATGAGCTTACC
CAAGATGAAGAAGGACATTTACTGGGACGATTCTGCTGCTGCCACCACACATTGGCAGCTGCTGAC
TACTGCATACCCTCATTTCTGGGTCAACAGTCCAGATGGGGCTGTCTGGGTCCGACTTTCCTGACGAGG
AGTGGCTGTGGGATTATGAGAAGCATGGCCATCGGCATTCCATGATAAGAAGAGTCAAGCGGTTCCCTGAG
TGCCACGAAACACCCCTCCAGCCCCAGAAGAAGACTACAGGAGGCAGACAAGTGACAGCTCCATGTTT
TTACCCCGAGATGACCTCAGCCAGCCAGGGACCTACTGGATGTGCCCTCAAGAAACCCCCCAGGGCCT
CACCCACCTGGAAGAAATCCTGCTTCCCAGAAGGAAGCCCCACGCTGCATTCAGCATGGGAGAGCTGTC
CACCATCAGGGAGACCAGCCAGACAAGCACTTTACAGAGCCTGACCCACAGTCCAGTGTGAGAACTTCC
CCCATCAAATGCCACTGGTACCTGAGGTATTGATCACAGCAGCCGAAGCACCAGTGCACATCAGGGG
GCTACCACCATGATTCGGTACCTCCATCTTGAGCTCTGAGTTTACAGGGGTTACAGCAAGCAAGACTGA
GCAGCAGCAGGGCCCCATGGGATCCATCCTGTCTCCCTCAGAGAAGGAGACACCTCCTGGAGGCCCCAGT
CCCCAGACAGTTTCAGCCAGCGCTGAGGAAAATATATTCAACTGTGAAGAAGACCCTGGTGATACCTTTC
TAAAAAGGTGGAGTCTTCCGGGATTCTGGGGTCCAGCCACACTTCCCTGGGAAACCTAAGTCCAGACCC
CATGAGCTCTCAGCCAGCTCTTTAATTGACACAGAAACATCCTCAGAGATCAGTGGGATCAACATTGTG
GCTGGCTCTCGAGTCTTCTGATATGCTGATTTAATGGAAAACCTGGACACCAAGGAAACAGATATCA
TAGAGCTGAACAAGGAACTGAGGAATCACCCAAATGA

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| <b>5' Read Nucleotide Sequence:</b> | <p>&gt;OriGene 5' read for NM_152439 unedited<br/>           NATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGCACGAGGACAAATGACAT<br/>           TTTTTTCTGGAAGGCAAATCAGAAGATATGGATAATAATATATTTTTGTCTCCAACC<br/>           TCTAAAAAGGCTAAAATTCAGCTAAAAGCATCAGTGTCACCAACGTGTCTGCTGAAGAA<br/>           ACTGCTTTATAATTTCTGTTATTCTACAGGGTTTTATGTTACTCTGGTAGTGAACCGAT<br/>           GGTGGAACCAGTTGTGAATTTGCCCTGGCCAGACAGGCTAATGTTCTCATCTCTAGCA<br/>           GTGTTACGGAAGCGACGAGCACGGGCGCCTGCTTAGAAGGACGCTGATGCGCTACGTCA<br/>           ATCTCACCTCCCTGCTCATCTTTTCGCTCGGTGAGCACTGCTGTGTACAAAAGATTTCCCA<br/>           CAATGGACCACGTGGTTGAAGCAGGTTTTATGACAACAGATGAAAGGAAAATTATTCAACC<br/>           ACCTCAAGTCTCCTCATCTGAAATATTGGGTTCCATTCTGTTTGGAAATCTTGCAA<br/>           CTAAGCCCGGAATGAAGGTAGAATCAGAGACAGTGTTGATCTGCAATCATTGATGACTG<br/>           AAATGAATCGATACCGCTCTGGTGCAGCCTCTTATTCGGTTATGACTGGGTTGGGATTC<br/>           CGCTGGTTTACACCCAGGTAGCAGAGCAGCTTATCAACCTTTTGGAGAAGATGATGATG<br/>           ATTTTGAACAACTGGTGCATTGACAGAAATTTGCAGGTCTCTCTTTAGCTGTGGACGA<br/>           NATGCACATGAGCTTACCAAGATGAAGAAGGACATTTACTGGGACGATTCTGCTGCTCN<br/>           GCCACCATACACATTGGCAGCTGCTGACTACTGCATACCCTCATTNCTGGGTCAACAGT<br/>           CCAGATGGGGCTGTCTGGGGTCGACTTTCTGACNNAGAGTGCTGTGGNATATGAAAGCAT<br/>           GGCATCGGCATTCATGATAGAAAATA</p> |
| <b>3' Read Nucleotide Sequence:</b> | <p>&gt;OriGene 3' read for NM_152439 unedited<br/>           TTTTGGGTTATTTTATTCTAAGACCTATGTAGTCAAGTGCCATCATATGACAAATGGT<br/>           AAGTGCAGCAGTCGTAAGGCATGGCCTAGGCACTTGGGAGCCCACGACAAACAGCTGTCC<br/>           TGAGAGCTCCCTGGGAGGAGTACCAACATCCGATCCCCATTATGCAGCTCTGGACCCCAT<br/>           TAGCCTCCAGCTCCAGTATCCTGCCCATTCCCAAATGACCCGATAGACACAGTAACTGG<br/>           TCCCGTGTTCGACACGATTAGGATTTTTGCATAGAGTTCAAGTTAAACAGATGTGAGT<br/>           CATCTTATTCTTTGGTCCATAGCATTTGGCTATGCAAATTTTCAATTTCTTTGGCTTCG<br/>           TTTTCTCCAGTGCCCAACCAAAATAGTGAAGCAGAAAAGAAATGTCAATGGCTGCAAG<br/>           GGCACGGGGGAACCATCACTCTATATGCCTTCCACTGGAAGTGAGACTGGAAGGGTAT<br/>           CAGGCTGGATTTGTTGACACCTTTGATGATTCTGTAGGAGGCTTGGCAATGTCTTATAT<br/>           TTTGAAATTCATGGCAAGACATAAGCAACAGATTTGGCAAGAGGAAATATTATAACCTGA<br/>           AAAATGGGACAGATTACTAGAAAAGCAGCACAACCAGGGAGAAGGGAAGGAAAAAAGG<br/>           ATGACAGAATAAAAAGGAAAAGAGAGAAAAGTAAAAAAGGAAATTGAAGAGAATTAAAGT<br/>           TCTGGTGTGATGAAGCTTAAGAATCAGGAAGTGATAATAACAATAATAGTTATAAAAGT<br/>           AGGAATGAGATGGTTAGAAAAGCCTCANNACAAAACGTTAGGAAGGAGGGGATCTTNCANN<br/>           GCATANGTGATCCATCTCCTTTCTTATGGCTNNAGANNAAGAAGAGAANAAGAAGAGAA<br/>           TGAGACCTGCTGTCTGGGCTTTGGTCTANGGGATGACTTGATCATGN</p>  |
| <b>Restriction Sites:</b>           | NotI-NotI   |
| <b>ACCN:</b>                        | NM_152439   |
| <b>Insert Size:</b>                 | 3180 bp   |
| <b>OTI Disclaimer:</b>              | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).  |
| <b>Components:</b>                  | 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).  |

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| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>   |
| <b>RefSeq:</b>                | <u>NM_152439.1, NP_689652.1</u>   |
| <b>RefSeq Size:</b>           | 2901 bp   |
| <b>RefSeq ORF:</b>            | 2901 bp   |
| <b>Locus ID:</b>              | 144453  |
| <b>UniProt ID:</b>            | <u>Q8N1M1</u>   |
| <b>Cytogenetics:</b>          | 12q15   |
| <b>Protein Families:</b>      | Ion Channels: Other, Transmembrane  |
| <b>Gene Summary:</b>          | <p>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]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, uses a downstream in-frame start codon, and lacks an in-frame exon in the central coding region, compared to variant 1. The encoded isoform (2) is shorter at the N-terminus, compared to isoform 1.</p> |