

Product datasheet for RC237965

Bestrophin 3 (BEST3) (NM_001282614) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bestrophin 3 (BEST3) (NM_001282614) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BEST3
Synonyms:	VMD2L3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC237965 representing NM_001282614 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTGTCACTTACTCCAGTAAAGTAGCAAATGCAACTTTTTTTGGATTCATAGGTTACTCCTCAAGT
GGAGAGGCAGCATCTACAACTACTGTACAGGGAATTTATTGTTTTGCTGTTCTTTATACAGCAATAAG
TTTGGTATACAGATTGTTACTTACAGGAGTCCAAAACGTTACTTTGAAAAATTATCAATTTACTGTGAC
AGATATGCTGAACAAATCCAGTAACCTTTGTGCTTGGGTTTTATGTTACTCTGGTAGTGAACCGATGGT
GGAACCAAGTTTGTGAATTTGCCCTGGCCAGACAGGCTAATGTTCCCTCATCTCTAGCAGTGTTCACGGAAG
CGACGAGCACGGGCGCTGCTTAGAAGGACGCTGATGCGCTACGTCAATCTCACCTCCCTGCTCATCTTT
CGCTCGGTGAGCACTGCTGTGTACAAAAGATTTCCCAATGGACCACGTGGTTGAAGCAGGTTTTATGA
CAACAGATGAAAGGAAATTTCAACCACCTCAAGTCTCCTCATCTGAAATATTGGGTTCCATTCATCTG
GTTTGGAAATCTTGCACTAAAGCCCGGAATGAAGGTAGAATCAGAGACAGTGTGATCTGCAATCATTG
ATGACTGAAATGAATCGATACCGCTCTTGGTGCAGCCTTATTTCGGTTATGACTGGGTTGGGATCCCGC
TGGTTTACACCCAGGTTGCTACTTGTCTATACCTTCTTTGCGTGCCTGATTGGACGCCAGTT
TTTGGATCCCACCAAGGCTACGCAGGGCATGACTTGGATCTTTACATTCCCATCTTACCCTCCTACAA
TTCTTCTCTATGCAGGATGGCTTAAGGTAGCAGAGCAGCTTATCAACCTTTTGGAGAAGATGATGATG
ATTTTGAACCTAAGTGCATTGACAGAAATTTGCAGGCTCTCTTTTACTGTGGACGAAATGCACAT
GAGCTTACCCAAGATGAAGAAGGACATTTACTGGGACGATTCTGCTGCTCGCCACCATAACATTTGGCA
GCTGCTGACTACTGCATACCCTCATTCTGGGGTCAACAGTCCAGATGGGAAACAGATGCCTAAGAATG
AGTGAAGATGGAAGATATAAAATCCCCTCAGCTCAATTCAGTGTGCTAAGAGTGATCCTGG
TGGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC237965 representing NM_001282614
Red=Cloning site Green=Tags(s)

MTVTYSSKVANATFFGFHRLLLKWRGSIYKLLYREFIVFAVLYTAISLVYRLLL TGVQKRYFEKLSIYCD
 RYAEQIPVTFVLGFYVTLVNNRWWNQFVNL PWPDRMLFLISSSVHGSDEHGRLRLRRLMRYVNL TSLLI
 RSVSTAVYKRFP TMDHVVEAGFMTTDERKLFNHLKSPHLKYWVPFIWFGNLATKARNEGRIRDSVDLQSL
 MTEMNRYRSWC SLLFGYDWWGIPLVYTQVVT LAVYTFFFA CLIGRQFLDPTKGYAGHDLDLYIPIFTLLQ
 FFFYAGWLKVAEQLINPFGEDDDDFETNWCIDRNLQVSL LAVDEMHM SLPKMKKDIYWDDSAARPPYTLA
 AADY CIP SFLGSTVQMGKQMPKNEWK MEDIKIPLPQPQFC AKSDPGG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

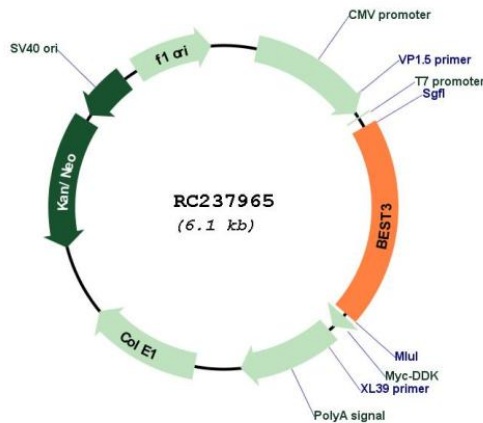
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001282614

ORF Size:	1194 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:	<ol style="list-style-type: none">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_001282614.1 , NP_001269543.1
RefSeq Size:	1607 bp
RefSeq ORF:	1197 bp
Locus ID:	144453
UniProt ID:	Q8N1M1
Cytogenetics:	12q15
Protein Families:	Ion Channels: Other, Transmembrane
MW:	47 kDa
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]