

Product datasheet for RC222213

OR51B2 (NM_033180) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OR51B2 (NM_033180) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR51B2
Synonyms:	HOR5'Beta3; OR51B1P
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222213 representing NM_033180 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGCCCAATATTACTGCAGCCCTTTTGTGCTGACTGGTTTTCCAGGGCTGGAGGCAGCTCATCACT
GGATCTCCATCCCCTTCTTGTGTTTATGTGTGCATCCTTCTGGGCAATGGCATGCTCCTCTACCTCAT
CAAGCATGACCACAGTCTTCATGAGCCCATGTACTACTTCCTCACCATGCTGGCAGGCACAGACCTCATG
GTGACATTGACCACGATGCCTACTGTAATGGGCATCCTATGGGTGAATCACAGGGAGATTAGCAGTGTGG
GCTGCTTCTACAGGCTTACTTTATCACTCCCTTCTGTTGTGGAATCAGGTTCCCTCCTGGCAATGGC
ATATGATCGTTTCATTGCCATCCGAATCCTTTGAGATATGCTTCCATTCTACCAATACTAGAGTCATA
GCGTTAGGAGTGGGAGTGTCTAAGGGGTTTTGTATCCATCCTGCCTGTAATTTGCGTCTTTTTTCAT
TTTCATATTGCAAATCTCATGTTATCACACGTGCTTTCTGCCTCCACCAAGAAATCATGAGACTGGCTTG
TGCTGACATAACTTTCAATAGACTTTACCCTGTAATTTGATCTCTTTAACAATCTTCTAGACTCTCTG
ATCATCTCTTCTCCTATATTCTAATCTTAATACTGTCATAGGCATTGCCTCTGGTGAAGAGAGAGCCA
AAGCCCTCAATACCTGTATCTCCACATTAGTTGTGTTCTTATCTTCTATGTTACGGTGATGGGTTTGAC
ATTCATTTACAGATTTGGAAGAATGTGCCAGAGGTTGTCCACATTATCATGAGTTACATCTACTTCCTC
TTTCCTTCTTTAATGAACCCTGTATCTACAGCATCAAAACCAAGCAAATACAATATGGCATTATCCGCC
TTTTATCTAAACATAGGTTTAGTAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC222213 representing NM_033180
 Red=Cloning site Green=Tags(s)

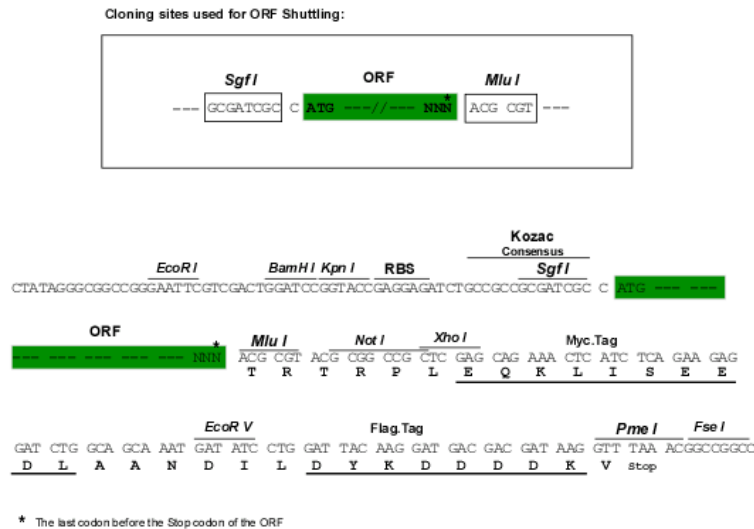
MWPNITAAPFLLTGFPGLEAAHHWISIPFFAVYVCILLGNGMLLYLIKHDHSLHEPMYYFLTMLAGTDLM
 VLTMTPTVMGILWVNHREISSVGCFLQAYFIHLSVSVESGSLAMAYDRFIAIRNPLRYASILNTRVI
 ALGVGVFLRGFVSILPVILRLFSFSYCKSHVITRAFCLHQEIMRLACADITFNRLYPVILISLTIFLDSL
 IILFSYILILNTVIGIASGEERAKALNTCISHISCVLIFYVTVMGLTFIYRFGKNVPEVVHIIMSYIYFL
 FPSLMNPVIYSIKTKQIQYGIIRLLSKHRFSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6464_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_033180

ORF Size: 936 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_033180.3](#)

RefSeq Size: 939 bp

RefSeq ORF: 939 bp

Locus ID: 79345

UniProt ID: [Q9Y5P1](#)

Cytogenetics: 11p15.4

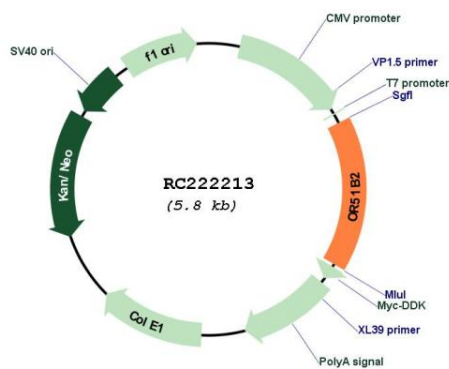
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Olfactory transduction

MW: 35.2 kDa

Gene Summary: Olfactory receptors interact with odorant molecules in the nose, to initiate a neuronal response that triggers the perception of a smell. The olfactory receptor proteins are members of a large family of G-protein-coupled receptors (GPCR) arising from single coding-exon genes. Olfactory receptors share a 7-transmembrane domain structure with many neurotransmitter and hormone receptors and are responsible for the recognition and G protein-mediated transduction of odorant signals. The olfactory receptor gene family is the largest in the genome. The nomenclature assigned to the olfactory receptor genes and proteins for this organism is independent of other organisms. This olfactory receptor gene is a segregating pseudogene, where some individuals have an allele that encodes a functional olfactory receptor, while other individuals have an allele encoding a protein that is predicted to be non-functional. [provided by RefSeq, Jun 2015]

Product images:



Circular map for RC222213