

## Product datasheet for **RG22213**

### OR51B2 (NM\_033180) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OR51B2 (NM_033180) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	OR51B2
Synonyms:	HOR5'Beta3; OR51B1P
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG22213 representing NM_033180 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTGGCCCAATATTACTGCAGCCCTTTTTGCTGACTGGTTTTCCAGGGCTGGAGGCAGCTCATCACT  
GGATCTCCATCCCCTTTTGTGTTTATGTGTGCATCCTTCTGGGCAATGGCATGCTCCTCTACCTCAT  
CAAGCATGACCACAGTCTTCATGAGCCCATGTACTACTCCTCACCATGCTGGCAGGCACAGACCTCATG  
GTGACATTGACCACGATGCCTACTGTAATGGGCATCCTATGGGTGAATCACAGGGAGATTAGCAGTGTGG  
GCTGCTTCTACAGGCTTACTTTATCACTCCCTTCTGTGTGGAATCAGGTTCCCTCCTGGCAATGGC  
ATATGATCGTTTCATTGCCATCCGCAATCCTTTGAGATATGCTTCCATTTTACCACAACTAGAGTCATA  
CGTTAGGAGTGGGAGTGTCTAAGGGTTTTGTATCCATCCTGCCTGTAATTTGCGTCTTTTTTCAT  
TTTCATATTGCAAATCTCATGTTATCACACGTGCTTTCTGCCTCCACCAAGAAATCATGAGACTGGCTTG  
TGCTGACATAACTTTCAATAGACTTTACCCTGTAATTTGATCTCTTTAAACAATCTTCTAGACTCTCTG  
ATCATCTTCTCCTATATTCTAATCTTAATACTGTATAGGCATTGCCTCTGGTGAAGAGAGAGCCA  
AAGCCCTCAATACCTGTATCTCCACATTAGTTGTGTTCTTATCTTCTATGTTACGGTGATGGGTTTGAC  
ATTCATTTACAGATTTGGGAAGAATGTCCAGAGGTTGTCCACATTATCATGAGTWACATCTACTTCCTC  
TTTCTCTTTAATGAACCCTGTATCTACAGCATCAAACCAAGCAAATACAATATGGCATTATCCGCC  
TTTTATCTAAACATAGGTTTAGTAGG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG222213 representing NM\_033180  
Red=Cloning site Green=Tags(s)

MWPNITAAPFLLTGFPGLEAAHHWISIPFFAVYVCILLGNGMLLYLIKHDHSLHEPMYYFLTMLAGTDLM  
 VLT TTMPTVMGILWVNHREISSVGCFLQAYFIHLSVSVESGSLAMAYDRFIAIRNPLRYASIFTNTRVI  
 ALGVGVFLRGFVSILPVILRLFSYCKSHVITRAFCLHQEIMRLACADITFNRLYPVILISLTIIFLDSL  
 IILFSYILILNTVIGIASGEERAKALNTCISHISCVLIFYVTVMGLTFIYRFGKNVPEVVIIMSXIYFL  
 FPPLMNPVIYSIKTKIQYGIIRLLSKHRFSR

TRTRPLE - GFP Tag - V

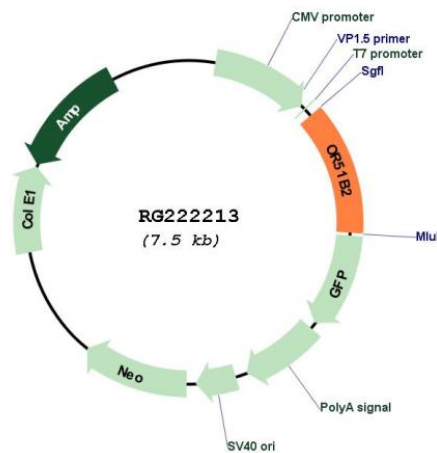
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_033180

**ORF Size:** 936 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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).
<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>	<a href="#">NM_033180.1</a> , <a href="#">NP_149420.1</a>
<b>RefSeq Size:</b>	939 bp
<b>RefSeq ORF:</b>	939 bp
<b>Locus ID:</b>	79345
<b>UniProt ID:</b>	<a href="#">Q9Y5P1</a>
<b>Cytogenetics:</b>	11p15.4
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Olfactory transduction
<b>Gene Summary:</b>	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]