

Product datasheet for **RG213010**

OR4F21 (NM_001005504) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OR4F21 (NM_001005504) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	OR4F21
Synonyms:	OR4F21P
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213010 representing NM_001005504 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGATGGAGAGAATCACTCAGTGGTATCTGAGTTTTTGTCTGGGACTCACTCATTTCATGGGAGATCC
 AGCTCCTCCTCTAGTGTCTCTGTGCTCTATGTGGCAAGCATTACTGAAACATCTTCATTGTGT
 TTCTGTGACCACTGACCCTCACTTACACTCCCCATGTACTTTCTACTGGCCAGTCTCTCCTTCATTGAC
 TTAGGAGCCTGCTCTGTCACTTCTCCAAGATGATTTATGACCTGTTCAAGCGCAAAGTCATCTCCT
 TTGGAGGCTGCATCGCTCAAATCTTCTCATCCACGTATTGGTGGTGTGGAGATGGTGTGCTCATAGC
 CATGGCCTTTGACAGATATGTGGCCCTATGTAAGCCCCTCCACTATCTGACCATATGAGCCCAAGAATG
 TGCCCTTCATTTCTGGCTGTTGCCTGGACCCTTGGTGTCACTCACTCCCTGTTCCAAGTGGCATTCTTG
 TTAATTTAGCCTTCTGTGGCCCTAATGTGTTGGACAGCTTCTACTGTGACCTTCTCGGCTTCTCAGACT
 AGCCTGTACCGACACCTACAGATTGCAGTTCATGGTCACTGTTAACAGTGGGTTTATCTGTGTGGTACT
 TTCTTCATACTTCTAATCTCCTACGTCTTCATCTGTTTACTGTTTGGAAACATTCCTCAGGTGGTTCAT
 CCAAGGCCCTTTCACTCTTTCAGCTCACAGCACAGTGGTCCTTTGTTCTTTGGTCCACCCATGTTTGT
 GTATACACGGCCACACCCTAATTCACAGATGGACAAGTTTCTGGCTATTTTGTATGCAGTTCTCACTCCT
 TTTCTGAATCCAGTTGTCTATACATTAGGAATAAGGAGATGAAGGCAGCAATAAAGAGAGTATGCAAAAC
 AGCTAGTGATTACAAGAAGATCTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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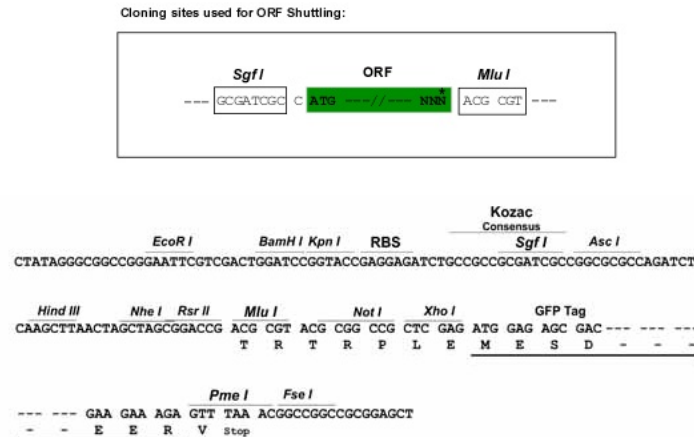
Protein Sequence: >RG213010 representing NM_001005504
 Red=Cloning site Green=Tags(s)

MDGENHSVVSEFLFLGLTHSWEIQLLLVFSSVLYVASITGNIFIVFSVTTDPHLHSPMYFLLASLSFID
 LGACSVTSPKMIYDLFRKRKVISFGGCIQIFFIHVIGGVEMVLLIAMAFDRYVALCKPLHYLTIMSPRM
 CLSFLAVAWTLGVSHSLFQLAFLVNLAFCGPNVLDSEYCDLPRLLRLACTDTYRLQFMVTVNSGFICVGT
 FFILLISYVFILFTVWKHSSGGSSKALSTLSAHSTVVLLFFGPPMFVYTRPHPNQMDKFLAIFDAVLTP
 FLNPVVYTFRNKEMKAAIKRVCKQLVIYKKIS

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001005504

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.

RefSeq: [NM_001005504.1](#), [NP_001005504.1](#)

RefSeq Size: 939 bp

RefSeq ORF: 939 bp

Locus ID: 441308

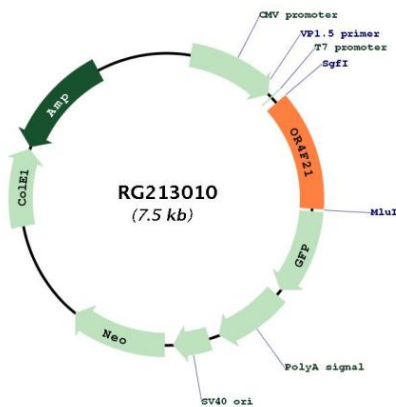
UniProt ID: [O95013](#)

Cytogenetics: 8p23.3

Protein Families: Transmembrane

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. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG213010