

Product datasheet for **RG223022**

OR5M3 (NM_001004742) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: OR5M3 (NM_001004742) Human Tagged ORF Clone
 Tag: TurboGFP
 Symbol: OR5M3
 Synonyms: OR11-191
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-AC-GFP (PS100010)
 E. coli Selection: Ampicillin (100 ug/mL)
 ORF Nucleotide Sequence: >RG223022 representing NM_001004742
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTCAATTCACCGATGTGACAGAGTTCATTCTTTGGGGCTAACGAGCCGTCGAGAATGGCAAGTTC
 TCTTCTTCATCATCTTTCTTGTGGTCTACATCATCACCATGGTGGGCAATATCGGCATGATGGTGTAAAT
 CAAGGTCAGTCTCAGCTTAACAACCCCATGTACTTTTCCCTCAGTCACTTGTCATTTGTTGATGTGTGG
 TTTTCTTCCAATGCACCCCTAAAATGTTGAAAACCTGTTTTAGATAAAAAACAATTACTTATGCTG
 GTTGTAGTACAGTGTTCCTTCTCATTGCTCTGTCCATGTGGAATTTTTATTCTTGCTGCGATGGC
 CTTTGATAGATACATGGCAATTGGGAATCCTCTGCTTTATGGCAGTAAAAATGCAAGGGTGTCTGTATT
 CGACTGATTACTTTCCCTTACATTTATGGTTTTCTGACGAGTCTGGCAGCAACATTATGGACTTACGGCT
 TGTAATTCATCTCTTACTTATTCATCCTCATTGCCATTCTGCGAATGCGCTCAGCAGAAGGAAGGCAGA
 AGGCCTTTCCACATGTGGGTCCCATCTGACAGCTGTCTATTATTTCTATGGTACTCTGATCTTCATGTA
 TCTCAGACGTCCCACAGAGGAGTCTGTGGAGCAGGGGAAGATGGTGGCTGTGTTCTATACCACAGTGATC
 CCCATGTTGAATCCCATGATCTACAGTCTGAGGAACAAGGATGTGAAAAGGCCATGATGAAAGTGATCA
 GCAGATCATGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG223022 representing NM_001004742
Red=Cloning site Green=Tags(s)

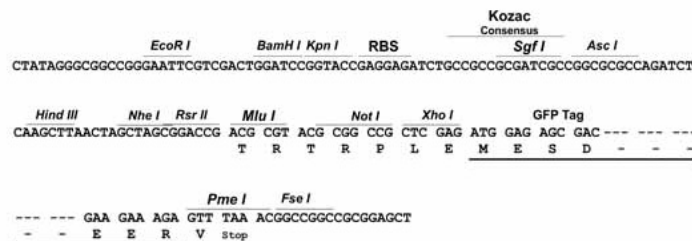
MLNFTDVTEFILLGLTSRREWQVLFFIIFLVVYIITMVGNI GMMVLIKVSPQLNNPMYFFLSHLSFVDVW
 FSSNVTPKMLLENLFSDDKTITYAGCLVQCFFFIALVHVEIFILAAMAFDRYMAIGNPLL YGSKMSRVVCI
 RLITFPYIYGFLTSLAATLWTYGLYFCGKIEINHFYCADPPLIKMACAGTFVKEYTMIILAGINFYSLT
 VIIISYLFILIAILRMRSAEGRQKAFSTCGSHLTAVIIFYGTLIFMYLRRPTEESVEQGMVAVFYTTVI
 PMLNPMIYSLRNKDVKKAMMKVISRSC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_001004742

ORF Size: 921 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_001004742.1](#), [NP_001004742.1](#)

RefSeq Size: 924 bp

RefSeq ORF: 924 bp

Locus ID: 219482

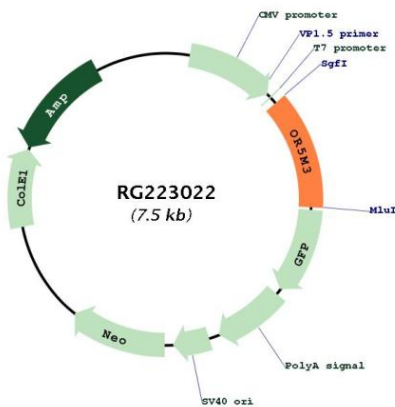
UniProt ID: [Q8NGP4](#)

Cytogenetics: 11q12.1

Protein Pathways: Olfactory transduction

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 RG223022