

Product datasheet for **RG216013**

OR4A5 (NM_001005272) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	OR4A5
Synonyms:	OR11-111
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG216013 representing NM_001005272
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGAGACAGAATAACAATATTACAGAATTTGTCCTCCTGGGCTTTTTTCAGGATCCTGGTGTGCAAAAAG
CATTATTTGTCATGTTTTACTCACATATNNGTGACAGTGGTGGGGAACCTGCTCATTGTGGTGGATAT
ATTCTCCAGCCCTCTTTGTGTTCCGCAATGTATTTCTTCTTGCCTGCCTGCTCATTATAGATGCTGCA
TATTCCTACTACCATTTCTCCAAGTTAATTGTAGGCTTATTCTGTGATAAAAAGACTATTTCTTCCAAG
GTTGCATGGGCCAGCTATTTATAGACCATTCTTTGGTGGGCTGAGGTCTTCTTCTGGTGGTATGGC
CTGTGATCGCTATGTGGCATCTGTAAGCCACTGCACTATTTGACCATCATGAATCGACAGGTTTGCTTC
CTTCTGTTGGTGGCCATGATTGGAGGTTTTGTACATTCTGCGTTTCAAATTGTTGTGTACAGTCTCC
CTTTCTGTGGTCCCAATGTCATTGTTCAATTCAGTTGTGACATGCACCCATTACTGGAAGTGGCATGCAC
TGACACCTACTTTATAGGCCTCACTGTTGTTGTCAATAGTGAGCAATCTGTATGGTCATTTCAACCTT
CTGTTAATCTCCTATGGAGTCATCCTAAGCTCCCTTAAACTTACAGTCAGGAAAAGAGGGGTAAAGCCT
TGCTACCTGCAGTCCGGCAGTACCGTTGTTGTCCTCTTTTTGTACCCTGTATTTTCATATATGTTAG
ACCTGTTTCAAACCTTCTACTGATAAGTTCATGACTGTGTTTATACCATTATCACACACATGCTGAGT
CCTTTAATATACGTTGAGAAATTCAGAGATGAGAAATGCTATAGAAAACTCTGGGTAAAAAGTTAA
CTATATTTATTATAGGAGGAGTGTCGTCCTCATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG216013 representing NM_001005272

Red=Cloning site Green=Tags(s)

MRQNNITEFVLLGFFQDPGVQKALFVMFLITYXVTVVGNNLIVVDIFSSPSLCSAMYFFLACLSFIDAA
YSTTISPKLIVGLFCDKKTISFQGGMGQLFIDHFFGGAEVLLVVMACDRYVAICKPLHYLTIMNRQVCF
LLL VVAMIGGFVHSAFQIVVYSLPFCGPNVIVHFSCDMHPLLELACTDTYFIGLTVVNSGAICMVFNL
LLISYGVILSSLKTYSQEKRGKALSTCSSGSTVVVLFVPCIFIYVRPVS NFPTDKFMTVFYTIITHMLS
PLIYTLRNSEMRNAIEKLLGKKLTIFIIGGVSVLM

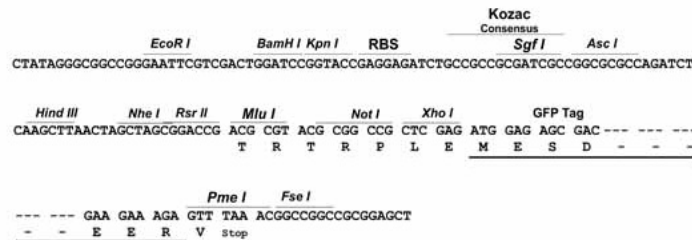
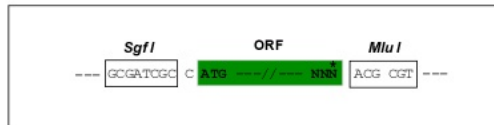
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

NM_001005272

ORF Size:

945 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:

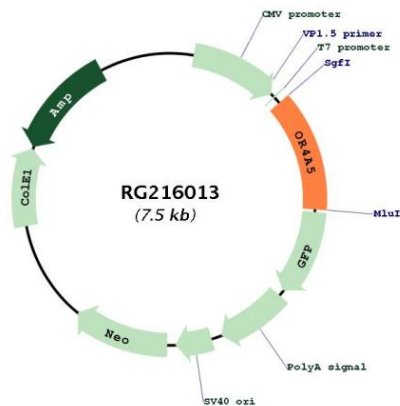
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_001005272.1, NP_001005272.1</u>
RefSeq Size:	948 bp
RefSeq ORF:	948 bp
Locus ID:	81318
UniProt ID:	<u>Q8NH83</u>
Cytogenetics:	11q11
Protein Families:	Transmembrane
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 RG216013