

Product datasheet for **RG224346**

OR2A7 (NM_001005328) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: OR2A7 (NM_001005328) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: OR2A7
Synonyms: HSDJ0798C17; OR2A21
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG224346 representing NM_001005328
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGGGGGACAATATAACATCCATCACAGAGTTCCTCTACTGGGATTTCCCGTTGGCCCAAGGATTCAGA
 TGCTCCTCTTTGGGCTCTTCTCCCTGTTCTACGCTTCCACCTGCTGGGAACGGGACCATACTGGGGCT
 CATCTCACTGGACTCCAGACTGCACGCCCCATGACTTCTTCTCTCACACCTGGCGGTGTCGACATC
 GCCTACGCCTGCAACACGGTGCCCCGGATGCTGGTGAACCTCCTGCATCCAGCCAAGCCCATCTCCTTTG
 CGGGCCGCATGATGCAGACCTTTCTGTTTTCCACTTTTGTGTCACAGAATGTCTCCTCCTGGTGGTGAT
 GTCTATGATCTGTACGTGGCCATCTGCCACCCCTCCGATATTTGGCCATCATGACCTGGAGAGTCTGC
 ATCACCTCGCGGTGACTTCTGGACCCTGGAGTCTTTTATCCTTGATTTCATCTTGTGTTACTTCTAC
 CTTTACCCTTCTGTAGGCCCCAGAAAATTTATCACTTTTTTTGTGAAATCTTGGCTGTTCTCAAACCTTGC
 CTGTGCAGATACCCACATCAATGAGAACATGGTCTTGGCCGGAGCAATTTCTGGGCTGGTGGGACCTTG
 TCCACAATTGTAGTTTCATATATGTGCATCCTCTGTGCTATCCTTCAGATCCAATCAAGGGAAGTTTCA
 GGAAAGCCTTCTGCACCTGCTTCTCCACCTCTGTGTGATTGGACTCTTTTATGGCACAGCCATTATCAT
 GTATGTTGGACCCAGATATGGGAACCCCAAGGAGCAGAAGAAATATCTCCTGCTGTTTACAGCCTCTTT
 AATCCCATGCTCAATCCCCTTATCTGTAGTCTTAGGAACCTCAGAAGTGAAGAATACTTTGAAGAGAGTGC
 TGGGAGTAGAAAGGGCTTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG224346 representing NM_001005328
 Red=Cloning site Green=Tags(s)

MGDNITSITEFLLLGFVPVGPRIQMLLFGLFSLFYVFTLLNGTILGLISLDSRLHAPMYFFLSHLAVVDI
 AYACNTVPRMLVNLLHPAKPISFAGRMMQTFLLFSTFAVTECLLLVMSYDLYVAICHPLRYLAIMTWRVC
 ITLAVTSWTTGVLLSLIHLVLLPLPFCRPQKIYHFFCEILAVLKLACADTHINENMVLAGAISGLVGPL
 STIVVSYMCILCAILQIQSREVQRKAFCTCFSHLCVIGLFGYGTAIMYVGPVRYGNPKQKKYLLLFHSLF
 NPMLNPLICSLRNSEVKNTLKRVLGVERAL

TRTRPLE - GFP Tag - V

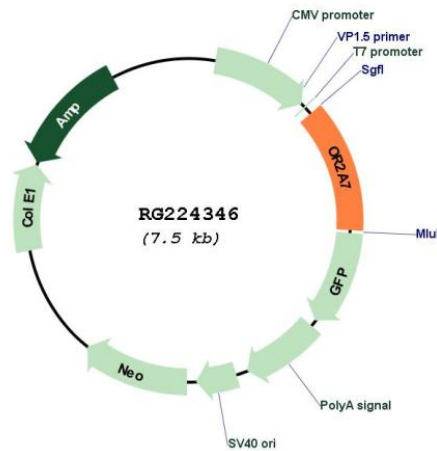
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001005328

ORF Size: 930 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:	<ol style="list-style-type: none">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_001005328.1 , NP_001005328.1
RefSeq Size:	933 bp
RefSeq ORF:	933 bp
Locus ID:	401427
UniProt ID:	Q96R45
Cytogenetics:	7q35
Protein Families:	Druggable Genome, 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]