

## Product datasheet for **RG212370**

### **TAS1R1 (NM\_177540) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	TAS1R1 (NM_177540) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TAS1R1
Synonyms:	GM148; GPR70; T1R1; TR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG212370 representing NM\_177540  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGCTCTGCACGGCTCGCCTGGTCGGCCTGCAGTTCCTCATTTCCTGCTGCTGGCCTTTGCTGCC  
 ATAGCACGGAGTCTTCTCCTGACTTCACCTCCCGGAGATTACCTCCTGGCAGGCCTGTCCCTCTCCA  
 TTCTGGCTGTCTGCAGGTGAGGCACAGACCCGAGGTGACCCTGTGTGACAGGTCTGTAGCTTCAATGAG  
 CATGGCTACCACCTCTTCCAGGCTATGCGGCTTGGGGTTGAGGAGATAAAACAACCTCCACGGCCCTGCTGC  
 CCAACATCACCTGGGGTACCAGCTGTATGATGTGTGTTCTGACTCTGCCAATGTGTATGCCACGCTGAG  
 AGTGTCTCCCTGCCAGGGCAACACCACATAGAGCTCCAAGGAGACCTTCTCCACTATCCCTACGGTG  
 CTGGCAGTGATTGGCCCTGACAGCACCAACCGTGTGCCACCACAGCCGCTGCTGAGCCCTTCTCTGG  
 TGCCCATGCTTTTGGAGCAGATCCACAAGTGCATTTCTTCTACACAAGGACTGTGGCGTTTAAATGA  
 CAACAGAGATCCCTCAGTAGCTATAACATAATTGCCTGGGACTGGAATGGACCAAGTGGACCTTCAGG  
 GTCCTCGTTCCCTCCACATGGTCTCCAGTTCAGCTAAACATAAATGAGACCAAAATCCAGTGGCAGCGAA  
 AGGACAACCAGGTGCCTAAGTCTGTGTGTTCCAGCGACTGTCTTGAAGGGCACCAGCGAGTGTTACGGG  
 TTTCCATCACTGCTGCTTGTAGTGTGTGCCCTGTGGGGCTGGGACCTTCTCAACAAGAGTGACCTCTAC  
 AGATGCCAGCCTTGTGGGAAAGAAGAGTGGGCACCTGAGGGAAGCCAGACCTGCTTCCCGCAGCTGTGG  
 TGTTTTGGCTTTGCGTGAGCACACCTCTTGGGTGCTGCTGGCAGCTAACACGCTGCTGCTGCTGCTGCT  
 GCTTGGGACTGCTGGCCTGTTTGCCTGGCACCTAGACACCCCTGTGGTGAAGTCAAGAGGGGGCCGCTG  
 TGCTTTCTTATGCTGGGCTCCCTGGCAGCAGGTAGTGGCAGCCTCTATGGCTTCTTTGGGAACCCACAA  
 GGCTCGGTGCTTGTACGCCAGGCCCTTTTGCCTTGGTTTCCACATCTTCTGCTGCTGCTGACAGT  
 TGCTCATTCCTCAACTAATCATCATCTTCAAGTTTTCCACCAAGGTACCTACATTCTACCAGCCTGGGTC  
 CAAAACCAGGTGCTGGCCTGTTTGTGATGATCAGCTCAGCGGCCAGCTGCTTATCTGTCTAAGTGGC  
 TGGTGGTGTGGACCCACTGCCTGCTAGGGAATACCAGCGCTTCCCCATCTGGTGTGCTTGTAGTGCAC  
 AGAGACCAACTCCCTGGGCTTACTACTGGCCTTCTCTACAATGGCCTCTCTCCATCAGTGCCTTTGCC  
 TGCAGCTACCTGGGAAGGACTTGCAGAGAACTACAACGAGGCCAAATGTGTCACCTTCAGCCTGCTCT  
 TCAACTTCGTGCTGCTGGATCGCCTTCTTACCAGGCCAGCGTCTACGACGGCAAGTACCTGCTGCGGC  
 CAACATGATGGCTGGCTGAGCAGCCTGAGCAGCGGCTTCGGTGGTATTTTCTGCTAAGTGTACGTG  
 ATCCTCTGCCGCCAGACCTCAACAGCACAGAGCACTTCCAGGCCTCCATTACAGACTACACGAGGCGCT  
 GGGCTCCACC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG212370 representing NM\_177540  
 Red=Cloning site Green=Tags(s)

MLLCTARLVGLQLLISCCWAFACHSTESSPDFTLPGDYLLAGLFPLHSGCLQVRHRPEVTLCDRSCSFNE  
 HGYHLFQAMRLGVVEINNSTALLPNITLGYQLYDVCSDSANVYATLRVLSLPGQHHEIQLQDGLLHYSPTV  
 LAVIGPDSTNRAATTAALLSPFLVPMLLEQIHKVHFLHDKDTVAFNDNRDPLSSYNI IAWDWNPKWFTT  
 VLGSSTWSPVQLNINETKIQWHGKDNQVPKSVCSDDCLEGHQVRVVTGFHHCCFECVPCGAGTFLNKSDLY  
 RCQPCGKEEWAPEGSQTCFPRVFLALREHTSWVLLAANTLLLLLLGTAGLFAWHLDPVVRSAAGRL  
 CFLMLGSLAAGSGSLYGFGEPTRPACLLRQALFALGFTIFLSCLTVRSFQLIIIFKFSTKVPTFYHAWV  
 QNHGAGL FVMISSAAQLL ICLTWLVVWTPLPAREYQRFPHLVMLECTETNSLGFILAFLYNGLLSISAF  
 CSYLGKDLPENYNEAKCVTF SLLFNFSWIAFFTTASVYDGKYLPAANMMAGLSSLSSGGYFLPKCY  
 ILCRPDLNSTEHFQASIQDYTRRCGST

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_177540

**ORF Size:** 1761 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\\_177540.3](#)

**RefSeq Size:** 1945 bp

**RefSeq ORF:** 1764 bp

**Locus ID:** 80835

**UniProt ID:** [Q7RTX1](#)

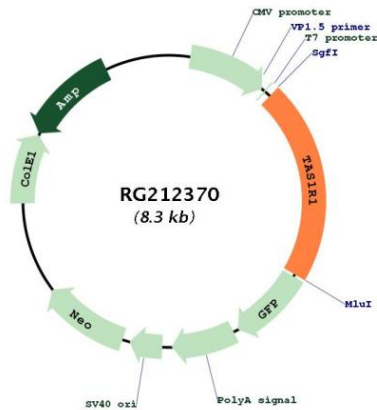
**Cytogenetics:** 1p36.31

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Taste transduction

**Gene Summary:** The protein encoded by this gene is a G protein-coupled receptor and is a component of the heterodimeric amino acid taste receptor T1R1+3. The T1R1+3 receptor responds to L-amino acids but not to D-enantiomers or other compounds. Most amino acids that are perceived as sweet activate T1R1+3, and this activation is strictly dependent on an intact T1R1+3 heterodimer. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]

**Product images:**



Circular map for RG212370