

Product datasheet for **RC212370**

TAS1R1 (NM_177540) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TAS1R1 (NM_177540) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TAS1R1
Synonyms:	GM148; GPR70; T1R1; TR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212370 representing NM_177540
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCTCTGCACGGCTCGCCTGGTGGCCTGCAGTTCCTCATTTCCTGCTGCTGGCCTTTGCTGCC
 ATAGCACGGAGTCTTCTCCTGACTTCACCTCCCGGAGATTACCTCCTGGCAGGCTGTCCCTCTCCA
 TTCTGGCTGTCTGCAGGTGAGGCACAGACCCGAGGTGACCCTGTGTGACAGGTCTGTAGCTTCAATGAG
 CATGGCTACCACCTCTTCCAGGCTATGCGGCTTGGGGTTGAGGAGATAAACTCCACGGCCCTGCTGC
 CCAACATCACCTGGGGTACCAGCTGTATGATGTGTGTTCTGACTCTGCCAATGTGTATGCCACGCTGAG
 AGTGTCTCCCTGCCAGGGCAACACCACATAGAGCTCCAAGGAGACCTTCTCCACTATCCCTACGGTG
 CTGGCAGTGATTGGCCCTGACAGCACCAACCGTGTGCCACCACAGCCCTGCTGAGCCCTTCTCTGG
 TGCCCATGCTTTTGGAGCAGATCCACAAGTGCATTTCTTCTACACAAGGACTGTGGCGTTAATGA
 CAACAGAGATCCCTCAGTAGCTATAACATAATTGCCCTGGGACTGGAATGGACCAAGTGGACCTTACG
 GTCCTCGTTCTCCACATGGTCTCCAGTTCAGCTAAACATAAATGAGACCAAAATCCAGTGGCAGCGAA
 AGGACAACCAGGTGCCTAAGTCTGTGTGTTCCAGCGACTGTCTTGAAGGGACCAGCGAGTGGTTACGGG
 TTTCCATCACTGCTGCTTGTGAGTGTGTCCTGTGGGGCTGGGACCTTCTCAACAAGAGTGACCTTAC
 AGATGCCAGCCTTGTGGGAAAGAAGAGTGGGCACCTGAGGGAAGCCAGACCTGCTTCCCGCAGCTGTGG
 TGTTTTGGCTTGTGCTGAGCACCTCTTGGGTGCTGCTGGCAGCTAACACGCTGCTGCTGCTGCTGCT
 GCTTGGGACTGCTGGCCTGTTTGCCTGGCACCTAGACCCCTGTGGTGAAGTCAAGCAGGGGGCCGCTG
 TGCTTTCTTATGCTGGGCTCCCTGGCAGCAGGTAGTGGCAGCCTCTATGGCTTCTTGGGAAACCCACAA
 GGCTCGGTGCTTGCTACGCCAGGCCCTTTGCCCTTGGTTTCCACATCTTCTGCTGCTGACAGT
 TGCTCATTCCAATAATCATCATCTTCAAGTTTTCCACCAAGGTACCTACATTCTACCACGCTGGGTC
 CAAAACCAGGTGCTGGCCTGTTTGTGATGATCAGCTCAGCGGCCAGCTGCTTATCTGTCTAATTGGC
 TGGTGGTGTGGACCCACTGCCTGCTAGGGAATACCAGCGCTTCCCCATCTGGTGTGCTTGTGAGTGCAC
 AGAGACCAACTCCCTGGGCTTACTACTGGCCTTCTCTACAATGGCCTCTCTCCATCAGTGCCTTTGCC
 TGCAGCTACCTGGGAAGGACTTGCAGAGAACTACAACGAGGCCAAATGTGTCACCTTACGCTGCTCT
 TCAACTCGTGTCTGGATCGCCTTCTTACCACGGCCAGCGTCTACGACGGCAAGTACCTGCTGCGGC
 CAACATGATGGCTGGCTGAGCAGCCTGAGCAGCGGCTTCGGTGGTATTTCTGCCTAAGTGTACGTG
 ATCCTCTGCCGCCAGACCTCAACAGCACAGGACTTCCAGGCCTCCATTACAGACTACACGAGGCGCT
 GGGCTCCACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212370 representing NM_177540
 Red=Cloning site Green=Tags(s)

MLLCTARLVGLQLLISCCWAFACHSTESSPFTLPGDYLLAGLFPLHSGCLQVRHRPEVTLCDRSCSFNE
 HGYHLFQAMRLGVEEINNSTALLPNITLGYQLYDVCSDSANVYATLRVLSLPGQHHIELQGDLLHYSPTV
 LAVIGPDSTNRAATTAALLSPFLVPMLLEQIHKVHFLHDKDTVAFNDNRDPLSSYNIIAWDWNGPKWFTT
 VLGSSTWSPVQLNINETKIQWHGKDNQVPKSVCSDDCLEGHQVRVTFGFHCCFECVPCGAGTFLNKSDLY
 RCQPCGKEEWAPEGSQTCFPRTVVFLALREHTSWVLLAANTLLLLLLGTAGLFAWHLDPVVRSSAGGRL
 CFLMLGSLAAGSGSLYGFGEPTRPACLLRQALFALGFTIFLSCLTVRSFQLIIIFKFSTKVPTFYHAWV
 QNHGAGL FVMISSAAQLLICTLWLVVWTPLPAREYQRFPHLVMLECTETNSLGFILAFLYNGLLSISAF
 CSYLKDLPENYNEAKCVTFSLFNFSWIAFFTTASVYDGKYLPAANMMAGLSSLSSGGYFLPKCYV
 ILCRPDLNSTEHFQASIQDYTRRCGST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6110_h09.zip

Restriction Sites: SgfI-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

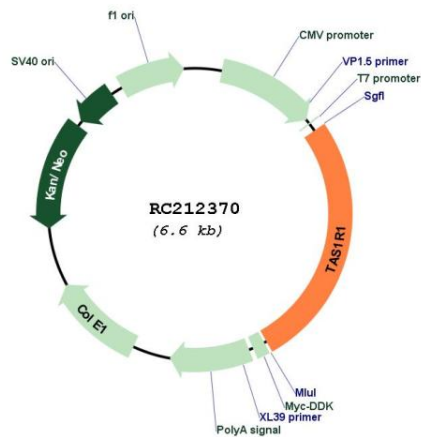
RefSeq ORF: 1764 bp

Locus ID: 80835

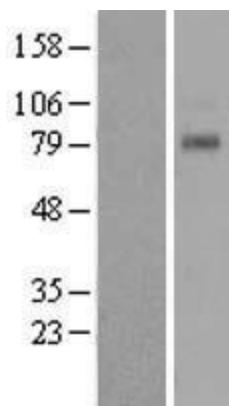
UniProt ID: [Q7RTX1](#)
Cytogenetics: 1p36.31
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Taste transduction
MW: 65 kDa

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]

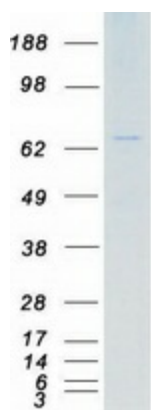
Product images:



Circular map for RC212370



Western blot validation of overexpression lysate (Cat# [LY403591]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212370 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TAS1R1 protein (Cat# [TP312370]). The protein was produced from HEK293T cells transfected with TAS1R1 cDNA clone (Cat# RC212370) using MegaTran 2.0 (Cat# [TT210002]).