

## Product datasheet for **MG227268**

### Tas1r3 (NM\_031872) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tas1r3 (NM_031872) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tas1r3
Synonyms:	Sac; T1r3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide  
Sequence:**

>MG227268 representing NM\_031872  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCAGCTTTGGCTATCATGGGTCTCAGCCTGGCTGCTTTCCTGGAGCTTGGGATGGGGCCTCTTTGT  
 GTCTGTACAGCAATTC AAGGCACAAGGGGACTACATACTGGGCGGGCTATTTCCCTGGGCTCAACCGA  
 GGAGGCCACTCTCAACCAGAGAACAACCCAACAGCATCCCGTGCAACAGGTTCTCACCCCTTGGTTTG  
 TTCCTGGCCATGGCTATGAAGATGGCTGTGGAGGAGATCAACAATGGATCTGCCTTGCTCCCTGGGCTGC  
 GGCTGGGCTATGACCTATTTGACACATGCTCCGAGCCAGTGGTACCATGAAATCCAGTCTCATGTTCTT  
 GGCCAAGTGGGAGTCAAAGCATTGCTGCCTACTGCAACTACACACAGTACCAACCCCGTGTGCTGGCT  
 GTCATCGGCCCCACTCATCAGAGCTTGCCTCATTACAGGCAAGTTCTTCAGCTTCTTCCCTCATGCCAC  
 AGGTCAGCTATAGTGCCAGCATGGATCGGCTAAGTGACCGGGAACGTTTCCATCCTTCTCCGCACAGT  
 GCCCAGTGACCGGTGCAGCTGCAGGCAGTTGTGACTCTGTTGCAGAACTTCAGCTGGAAGTGGGTGGCC  
 GCCTTAGGGAGTGATGATGACTATGGCCGGGAAGTCTGAGCATCTTTTCTAGTCTGGCCAATGCACGAG  
 GTATCTGCATCGCACATGAGGGCCTGGTGCCACAACATGACACTAGTGGCCAACAGTTGGGCAAGGTGCT  
 GGATGTACTACGCCAAGTGAACCAAGTAAAGTACAAGTGGTGGTGTGTTTGCCTCTGCCCGTGTGCT  
 TACTCCCTTTTATGTTACAGCATCCATCATGGCCTCTCACCCAAGGTATGGGTGGCCAGTGTGCTTGGC  
 TGACATCTGACCTGGTATGACACTTCCAATATTGCCGTGTGGGCACTGTGCTTGGGTTTTTGCAGCG  
 GGGTGCCTACTGCCTGAATTTCCATTATGTGGAGACTCACCTTGCCCTGGCCGCTGACCCAGCATTC  
 TGTGCCTCACTGAATGCGGAGTTGGATCTGGAGAACATGTGATGGGCAACGCTGTCCACGGTGTGACG  
 ACATATGCTGCAGAACCTATCATCTGGGCTGTTGCAGAACCTATCAGCTGGGCAATGGCACCAAAAT  
 ATTTGCAACCTATGCAGCTGTGTACAGTGTGGCTCAAGCCCTTACAACACCCTACAGTGAATGTCTCA  
 CATTGCCACGTATCAGAACATGTTCTACCTGGCAGCTCCTGGAGAACATGTACAATATGAGTTTCCATG  
 CTCGAGACTTGACACTACAGTTTGTGCTGAAGGGAATGTAGACATGGAATATGACCTGAAGATGTGGGT  
 GTGGCAGAGCCCTACACCTGTATTACATACTGTGGGCACCTTCAACGGCACCCCTTACAGTGCAGCAGTCT  
 AAAATGTACTGGCCAGGCAACCAGGTGCCAGTCTCCAGTGTTCGCCAGTGCAAAGATGGCCAGGTTT  
 GCCGAGTAAAGGGCTTTTCTTCTGCTGCTATGACTGCGTGGACTGCAAGGCGGGCAGTACCGGAAGCA  
 TCCAGATGACTTACCTGTACTCCATGTAACCAGGACCAGTGGTCCCAGAGAAAAGCACAGCCTGCTTA  
 CCTCGCAGGCCCAAGTTTCTGGCTTGGGGGAGCCAGTTGTGCTGTCACTCCTCCTGCTGCTTTGCCTGG  
 TGCTGGGTCTAGCACTGGCTGCTCTGGGCTCTCTGTCCACCAGTGGGACAGCCCTTGTCCAGGCCTC  
 AGGTGGCTCACAGTTCTGCTTTGGCCTGATCTGCCTAGGCCTCTTCTGCCTCAGTGTCTTCTGTTCCCA  
 GGGCGGCCAAGCTCTGCCAGTGCCTTGCACAACAACCAATGGCTCACCTCCCTCTCACAGGCTGCCTGA  
 GCACACTTCTCTGCAAGCAGCTGAGACCTTTGTGGAGTCTGAGCTGCCACTGAGCTGGGCAAACTGGCT  
 ATGCAGTACCTTCGGGGACTCTGGGCTGGCTAGTGGTACTGTTGGCCACTTTTGTGGAGGCAGCACTA  
 TGTGCCTGGTATTTGATCGCTTTCCACCAGAGGTGGTGACAGACTGGTCACTGCTGCCACAGAGGTAC  
 TGGAGCACTGCCACGTGCGTTCTGGGTGAGCCTGGGCTGGTGCACATACCAATGCAATGTTAGCTTT  
 CCTCTGCTTTCTGGGCACTTTCTGGTACAGAGCCAGCCTGGCCGCTACAACCGTGCCCGTGGTCTCACC  
 TTCGCCATGTAGCTTATTTATCACCTGGGTCTCTTTTGTGCCCTCCTGGCCAATGTGACAGGTGGCCT  
 ACCAGCCAGCTGTGCAGATGGGTGCTATCCTAGTCTGTGCCCTGGGCATCCTGGTCACTTCCACCTGCC  
 CAAGTGTATGTGCTTCTTTGGCTGCCAAAGCTCAACACCAGGAGTTCTTCTGGGAAGGAATGCCAAG  
 AAAGCAGCAGATGAGAACAGTGGCGGTGGTGAGGCAGCTCAGGGACACAATGAA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG227268 representing NM\_031872  
Red=Cloning site Green=Tags(s)

MPALAIMGLSLAAFLLELGMGASLCLSQQFKAQGDYILGGLFPLGSTEATLNQRTQPNSIPCNRFSPGLGL  
FLAMAMKMAVEEINNGSALLPGLRLGYDLFDTCEPVTMKSSLMFLAKVGSQSI AAYCNYTQYQPRVLA  
VIGPHSSELALITGKFFSFLMPQVSYSASMDRLSDRETFPSFFRTVPSDRVQLQAVVTLLQNF SWNWVA  
ALGSDDDYGREGLSIFSSLANARGICIAHEGLVPQHDTSGQQLGKVL DVL RQVNQSKVQVVVLFASARAV  
YSLFSYSIHHGLSPKVWVASESWLTSDLVMTLPNIARVGTVLGFLQRGALLPEFSHYVETHLALAADPAF  
CASLNAELDLEEHVMGQRCPRCDDIMLQNLSSGLLQNL SAGQLHHQIFATYA AVYSVAQALHNTLQCNVS  
HCHVSEHVL PWQLLENMYNMSFHARDLTLQFDAEGNVDMEYDLKMWWQSPTPVLHTVGT FNGLTLQLQQS  
KMYWPGNQVPVSQCSRQCKDGQVRRVKGFHSCCYDCVDCKAGSYRKHPDDFTCTPCNQDQWSPEKSTACL  
PRRPKFLAWGEPVVL SLLLLLCLVLGLALAAALGLSVHHWDSPLVQASGGSQFCFGLICLGLFCLSVLLFP  
GRPSSASCLAQQPMAHLPLTGCLSTLFLQAAETFVESELPLSWANWLC SYLRGLWAWLVLLATFVEAAL  
CAWYLIAFPPEVVDWSVLPTEVLEHCHVRSWVSLGLVHITNAMLAFCLFLGTFLVQSQPGRYNRARGLT  
FAMLAYFITWVSFVPLL ANVQVAYQPAVQMGAILVCALGILVTFHLPKCYVLLWLPKLNQEF FLGRNAK  
KAADENSGGGEAAQGHNE

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



<b>ACCN:</b>	NM_031872
<b>ORF Size:</b>	2574 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_031872.2</a></u> , <u><a href="#">NP_114078.1</a></u>
<b>RefSeq Size:</b>	3514 bp
<b>RefSeq ORF:</b>	2577 bp
<b>Locus ID:</b>	83771
<b>UniProt ID:</b>	<u><a href="#">Q925D8</a></u>
<b>Cytogenetics:</b>	4 87.65 cM
<b>Gene Summary:</b>	Putative taste receptor. TAS1R1/TAS1R3 responds to the umami taste stimulus (the taste of monosodium glutamate) and also to most of the 20 standard L-amino acids, but not to their D-enantiomers or other compounds. TAS1R2/TAS1R3 recognizes diverse natural and synthetic sweeteners. TAS1R3 is essential for the recognition and response to the disaccharide trehalose. Sequence differences within and between species can significantly influence the selectivity and specificity of taste responses.[UniProtKB/Swiss-Prot Function]