

## Product datasheet for **RR210558**

### Gucy2d (NM\_130737) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gucy2d (NM_130737) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gucy2d
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR210558 representing NM_130737 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGGTCTGCAGCAGGGCTGTACCCCGAAGGCCAGGACTGGACAGCGCCCACTGGAAGACCTGCC  
GGGCCCTGCCAGGGCCACGGGGACTCACGGTCAGACATCTGAGGACAGTCTTCCATATCGGTCTTCTC  
TGTGGTATTTGGGGTGTCTTGTCTGTGGGCTGACTCTTTCCCTGCCAGCATGGGCAAGAGAGACCTTC  
ACCCTTGGGGTGTCTGGTCCCTGGGACTGTGACCCTATCTTTGCCAGGCACTCCCTAGCATGGCTACCC  
AGTTGGCTGTAGATCGAGTCAATCAGGACGCCTCACTGCTGCTGGGCTCACAGTTGGATTCAAGATCCT  
CCCTACAGGCTGTGACACCCCTCATGCCCTGGCCACATTTGTGGCCACAGGAACACAGTGGCTGCTTTT  
ATAGGCCCTGTCAATCCTGGGTATTGTCCAGCAGCAGCTCTGCTGGCCCAAGGCTGGGGCAAGTCCCTCT  
TCTCTGGGCTGTGGAGCTCCAGAGGGAGGAGTGCCTTAGTGCCCACTTTGCCTTCTATGGCCGACGT  
GCTACTGTCTGCATGAGACACTTTGGCTGGGCTCGCTTGCCATCGTGTCTCTACCAGGACATCTGG  
GTAACCACAGCCCAGCAGCTAGCCACAGCTTTCAGGGCCCATGGGCTGCCTATCGGACTGATCACCTCCT  
TGGGACCTGGAGAGAAGGGGGCCACGGAGGTTTGAAGCAGCTCCACAGTGTGCATGGTCTGAAAATCGT  
GGTTCTGTGCATGCACTCAGCGCTGCTTGAGGGCTAGAGCAGACAGTCCCTGCTGCGCTGCGCGAGGGAG  
GAGGGCCTGACAGATGGCAGACTGGTCTTCTTGCCCTACGACACGCTGCTCTTTGCCCTGCCCTATCGTA  
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TCTGGACACCAGTCTGAGAGCCATGCCTTCACTGCTACCAAGATGAGAGGAGGGGACAGTGCCTTGTG  
GGGCCCGAGCAGGTGTCCCCTCTTTGGAATCTACGATGCCGTATCCTGTTGGCCATGCCCTGA  
ACCACTCTGAGACCCATGGAACGGGGCTCTCAGGGGCTCACTTAGGAACCATATAAGAGCTCTTGATGT  
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ACAAATGGTGAAGGAAGCCAGTTGGTCCCACCCACATCCTGGAGTGTGACACACAGCAGGTGCAGCCCC  
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CACACTATGCATACGAGGTGTGACAGCCCTGGGACGCTCCTGACTCTGACGATAACCTGTGTCCTGGCT  
CTGGTTGGTGGATTCTTGTACTTTATCAGGTTAGGCCTCCAGCAGCTGCGGCTGCTGCGGGGCCCC  
ATCGGATCCTGCTGACACCTCAAGAGCTCACCTTCCAGCGAACCCCAAGCCGGGAGGCCACATGT  
GGACAGTGGCAGCGAGTCAAGAAGTGTGGTAGATGGTGGGAGTCCACAGTCACTGATCCAGGGGTCAACA



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AGGAGCGTACCAGCCTTCTGGAGCACACCAACGTGGCCCTGTACCAGGGAGAGTGGGTGTGGCTGAAGA  
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 GATTTTGCAGATCCCTCCCTACACCTCTGTCCATCCAGCCTGGAGACCCATGGCAGGACCATATAACCA  
 AGAAATCCGGACTGGCTTTGCAAAGCTGCCAGAGTCTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR210558 representing NM\_130737  
 Red=Cloning site Green=Tags(s)

MAGLQQGCHPEGQDWTAPHWKTALPGRPLTVRHLRTVSSISVFSVFWGVLLWADSLSPAWARETF  
 TLGVLGPWDCDPIFAQALPSMATQLAVDRVNQDASLLLSQLDFKILPTGCDTPHALATFVAHRNTVAAF  
 IGPVNPGYCPAAALLAQGWGKSLFSWACGAPEGGALVPTLPSMADVLLSVMRHFHGWARLAIVSSHQDIW  
 VTTAQQALATAFRAHGLPIGLITSLGPGEKGATEVCKQLHSVHGLKIVVLCMHSALLGGLEQTVLLRCARE  
 EGLTDGRLVFLPYDTLLFALPYRNRSYLVLDDGPLQEAYDAVLTISLDTSPESHAFTATKMRGGAAANL  
 GPEQVSPLFGTIYDAVILLAHALNHSETHGTLSGAHLGNHIRALDVAGFSQRIRIDGKRRRLPQYVILD  
 TNGEGSQLVPTHILDVSTQQVQPLGTAVHFPPGSPPAHDASCWFDPNLTCIRGVQPLGSLTLTITCVLA  
 LVGGFLAYFIRLGLQQLRLLRPHRILLTPQELTFLQRTPSRRRPHVDSGSESRSVVDGGSPQSVIQGST  
 RSVPAFLEHTNVALYQGEVWVWKKFEAGTAPDLRPSLSLLRKMREMRHENVTAFLGLFVGPVVSAMVLE  
 HCARGSLEDLLRNEDLRLDWTFKASLLDLIRGLRYLHHRHFPHGRLKSRNCVVDTRFVLKITDHGYAEF  
 LESHCSFRPQPAPEELLWTAPELLRGRPGWPWGPKATFKGDVFSLGIILQEVLTDRPPYCSWGLSAEII  
 RKVASPPPLCRPLVSPDQGLECIQLMQLCWEEAPDDRPSLDQIYTQFKSINQGKTSVADSMRLMEKY  
 SQSLEGLVQERTEELELERRKTERLLSQMLPPSAHALKMGTTVEPEYFDQVTIYFSDIVGFTTISALSE  
 PIEVVGFNLNDLYTMFDAVLDSHDVYKVEITGDAYMVASGLPRRNGNRHAAEIANMALEILSYAGNFRMRH  
 APDVPIRVRAGLHSGPCVAGVVGLTMPRYCLFGDVTNTASRMESTGLPYRIHVSRTNVQALLSLDEGYKI  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

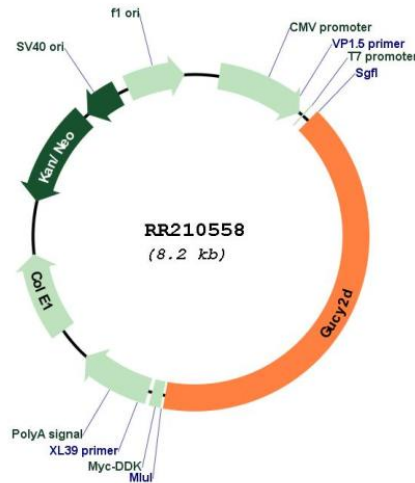
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_130737

**ORF Size:** 3330 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.

<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>NM_130737.4, NP_570093.1</u>
<b>RefSeq Size:</b>	3645 bp
<b>RefSeq ORF:</b>	3333 bp
<b>Locus ID:</b>	113911
<b>UniProt ID:</b>	<u>P51839</u>
<b>Cytogenetics:</b>	1q32
<b>MW:</b>	122 kDa
<b>Gene Summary:</b>	member of the membrane receptor guanylyl cyclase family, specifically expressed in a subpopulation of olfactory sensory neurons; may function directly in odor recognition [RGD, Feb 2006]