

## Product datasheet for RC220856

### GPCR 2037 (GPR151) (NM\_194251) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | GPCR 2037 (GPR151) (NM_194251) Human Tagged ORF Clone                       |
| Tag:                      | Myc-DDK   |
| Symbol:                   | GPCR 2037   |
| Synonyms:                 | GALR4; GALRL; GPCR; GPCR-2037; PGR7   |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| ORF Nucleotide Sequence:  | >RC220856 representing NM_194251<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGGCAGCTGCCTTTGCAGACTCTAACTCCAGCAGCATGAATGTGTCCTTTGCTCACCTCCACTTTG  
CCGGAGGGTACCTGCCCTCTGATCCCAGGACTGGAGAACCATCATCCCGGCTCTCTGGTGGCTGTCTG  
CCTGGTGGGCTTCGTGGAAACCTGTGTGTGATTGGCATCCTCCTCACAATGCTGGAAAGGAAAGCCA  
TCCATGATCCACTCCCTGATTCTGAATCTCAGCCTGGCTGATCTCCTCCTGCTGTTTTCTGCACCTA  
TCCGAGCTACGGGCTACTCCAAAAGTGTGGGATCTAGGCTGGTTTGTCTGCAAGTCTCTGACTGGTT  
TATCCACACATGCATGGCAGCCAAGAGCCTGACAATCGTTGTGGTGGCCAAAGTATGCTTCATGTATGCA  
AGTGACCCAGCCAAGCAAGTGAATCCACAACACTACACCATCTGGTCAGTCTGGTGGCCATCTGGACTG  
TGGCTAGCCTGTTACCCCTGCCGGAATGGTTCTTTAGCACCATCAGGCATCATGAAGGTGTGAAATGTG  
CCTCGTGGATGTACCAGCTGTGGCTGAAGAGTTTATGTCGATGTTTGGTAAGCTTACCCACTCCTGGCA  
TTTGGCCTTCCATTATTTTTGCCAGCTTTTATTTCTGGAGAGCTTATGACCAATGTAAAAACGAGGAA  
CTAAGACTCAAAATCTTAGAAACCAGATACGCTCAAAGCAAGTCACAGTGATGCTGCTGAGCATTGCCAT  
CATCTCTGCTCTCTTGTGGCTCCCCGAATGGGTAGCTTGGCTGTGGGTATGGCATCTGAAGGCTGCAGGC  
CCGGCCCCACCACAAGGTTTCATAGCCCTGTCTCAAGTCTTGATGTTTTCCATCTTTCAGCAAATCCCTC  
TCATTTTTCTGTGATGTCGGAAGAGTTTCAGGGAAGGCTTGAAAGGTGTATGGAATGGATGATAACCAA  
AAAACCTCCAAGTGTCTCAGAGTCTCAGGAAACACCAGCTGGCAACTCAGAGGGTCTTCTGACAAGGTT  
CCATCTCCAGAATCCCCAGCATCCATACAGAAAAAGAGAAACCCAGCTCTCCCTCCTCTGGCAAAGGGA  
AAACTGAGAAGGCAGAGATTCCCATCCTTCTGACGTAGAGCAGTTTTGGCATGAGAGGGACACAGTCCC  
TTCTGTACAGGACAATGACCCTATCCCCTGGGAACATGAAGATCAAGAGACAGGGGAAGGTGTTAAA

**ACGGT**ACGGCGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC220856 representing NM\_194251  
 Red=Cloning site Green=Tags(s)

MLAAAFADSNSSSMNVSAHLHFAGGYLPSDSQDWRTIIPALLVAVCLVGFVGNLCVIGILLHNAWKGP  
 SMIHSLILNLSLADLSLLLFSAPIRATAYSKSVWDLGWFVCKSSDWF IHTCMAAKSLTIVVAVKVCFMYA  
 SDPAKQVSIHNYTIWSVLVAIWTVASLLPLPEWFFSTIRHHEGVEMCLVDVPAVAEEFMSMFGKLYPLLA  
 FGLPLFFASFYFWRAYDQCKKRGTKTQNLNRNQIRSKQVTVMLLSIAIISALLWLPWVAVLWVWHLKAAG  
 PAPPQGFIALSQVLMFSISSANPLIFLVMSEEFREGLKGWVKWMITKKPPTVSEQETPAGNSEGLPKV  
 PPSPEPASISPEKEKPSPPSSGKGTAKAEIPILPDVEQFHERDTPVSVQDNDPIPWEHEDQETGEGVK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_194251

**ORF Size:** 1257 bp

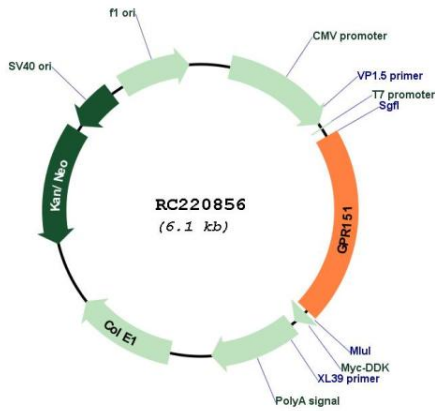
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

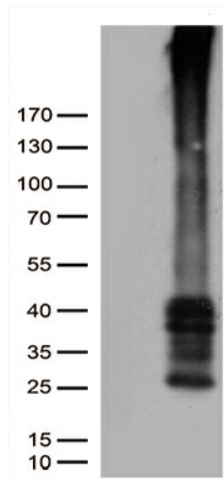
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

|                               |   |
|-------------------------------|---|
| <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_194251.3</u>  |
| <b>RefSeq Size:</b>           | 1260 bp   |
| <b>RefSeq ORF:</b>            | 1260 bp   |
| <b>Locus ID:</b>              | 134391  |
| <b>UniProt ID:</b>            | <u>Q8TDV0</u>   |
| <b>Cytogenetics:</b>          | 5q32  |
| <b>Protein Families:</b>      | Druggable Genome, Transmembrane   |
| <b>MW:</b>                    | 46.5 kDa  |
| <b>Gene Summary:</b>          | <p>This gene encodes an orphan member of the class A rhodopsin-like family of G-protein-coupled receptors (GPCRs). Within the rhodopsin-like family, this gene is a member of the SOG subfamily that includes somatostatin, opioid, galanin, and kisspeptin receptors. The orthologous mouse gene has a restricted pattern of neuronal expression which is induced following nerve injury. All GPCRs have a transmembrane domain that includes seven transmembrane alpha-helices. A general feature of GPCR signaling is the agonist-induced conformational change in the receptor, leading to activation of the heterotrimeric G protein. The activated G protein then binds to and activates numerous downstream effector proteins, which generate second messengers that mediate a broad range of cellular and physiological processes. [provided by RefSeq, Jul 2017]</p> |

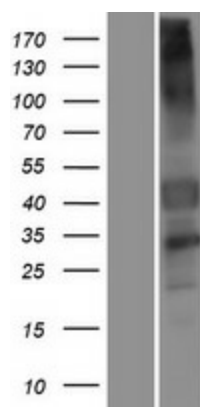
Product images:



Circular map for RC220856



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GPR151 (Cat# RC220856, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GPR151 (Cat# [TA811793])(1:5000). Positive lysates [LY405184] (100ug) and [LC405184] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY405184]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220856 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).