

## Product datasheet for **RG221897**

### GPBAR1 (NM\_170699) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GPBAR1 (NM_170699) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GPBAR1
Synonyms:	BG37; GPCR19; GPR131; M-BAR; TGR5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG221897 representing NM_170699 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCACTTGGTCTTGTGCTCTTCAGCCAGGACACCAGACATGGTCCAAACCGCTGCAGGGCTGGCTGCA  
GCAACTCCCTGACTCAGGAAGGCCAGGCTGGGCAGGCAATACCTGCTCCCAACAGCCATGCATGCCG  
GCTGCCGCTCCAGGACTCCCTGTCCCCAGGACCAAGATGACGCCAACAGCACTGGCGAGGTGCCAGC  
CCCATTCCCAAGGGGGCTTTGGGGCTCTCCCTGGCCCTGGCAAGCCTCATCATCACCGCGAACCTGCTCC  
TAGCCCTGGGCATCGCCTGGGACCGCCGCTGCGCAGCCACCTGCTGGCTGCTTCTTCTGAGCCTACT  
GCTGGCTGGGCTGCTCACGGGTCTGGCATTGCCACATTGCCAGGGCTGTGGAACAGAGTCGCCGGGT  
TACTGGTCTGCCTCCTCGTCTACTTGGCTCCAACTTCTCCTTCTCCTCTCCCTGCTTGCCAACTCTTGC  
TGGTGCACGGGGAGCGCTACATGGCAGTCTGAGGCCACTCCAGCCCCCTGGGAGCATTGGCTGGCCCT  
GCTCCTCACCTGGGCTGGTCCCCGTCTTTGCCAGTCTGCCCGCTCTGGGGTGGAACTGGACCCCT  
GGTGCCAACTGCAGTCCCAGGCTATCTCCAGCCCCCTACCTGTACCTCGAAGTCTATGGGCTCCTGC  
TGCCCCCGTGGGTGCTGCTGCCTTCTCTGTCCGCGTGTGGCCACTGCCACCGCCAGCTGCAGGA  
CATCTGCCGGCTGGAGCGGGCAGTGTGCCGCGATGAGCCCTCCGCCCTGGCCGGCCCTTACCTGGAGG  
CAGGCAAGGGCACAGGCTGGAGCCATGCTGCTCTTCGGGCTGTGCTGGGGCCCTACGTGGCCACACTGC  
TCCTCTCAGTCTGGCCTATGAGCAGCGCCCGCACTGGGGCTGGGACTGTTGTCCCTCCTCCTCCT  
AGGAAGTGCCAGTGCAGCGGCAGTGCCCGTAGCCATGGGGCTGGGCGATCAGCGCTACACAGCCCCCTGG  
AGGGCAGCCGCCAAAGGTGCCTGCAGGGGCTGTGGGAAGAGCCTCCCGGGACAGTCCCGGCCAGCA  
TTGCTACCACCAAGCAGCCAAAGCAGTGTGCACCTGGACTTGAAC

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG221897 representing NM\_170699  
Red=Cloning site Green=Tags(s)

MHLV L V L F S Q D T R H G P N R C R A G C S N S L T L R K A Q A G Q A I P A P N S H A C R L P L Q D S P V P R T K M T P N S T G E V P S  
 P I P K G A L G L S L A L A S L I I T A N L L L A L G I A W D R R L R S P P A G C F F L S L L L A G L L T G L A L P T L P G L W N Q S R R G  
 Y W S C L L V Y L A P N F S F L S L L A N L L L V H G E R Y M A V L R P L Q P P G S I R L A L L L T W A G P L L F A S L P A L G W N H W T P  
 G A N C S S Q A I F P A P Y L Y L E V Y G L L L P A V G A A A F L S V R V L A T A H R Q L Q D I C R L E R A V C R D E P S A L A R A L T W R  
 Q A R A Q A G A M L L F G L C W G P Y V A T L L L S V L A Y E Q R P P L G P G T L L S L L S L G S A S A A A V P V A M G L G D Q R Y T A P W  
 R A A A Q R C L Q G L W G R A S R D S P G P S I A Y H P S S Q S S V D L D L N

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_170699

**ORF Size:** 1167 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\\_170699.1](#), [NP\\_733800.1](#)

**RefSeq Size:** 1400 bp

**RefSeq ORF:** 993 bp

**Locus ID:** 151306

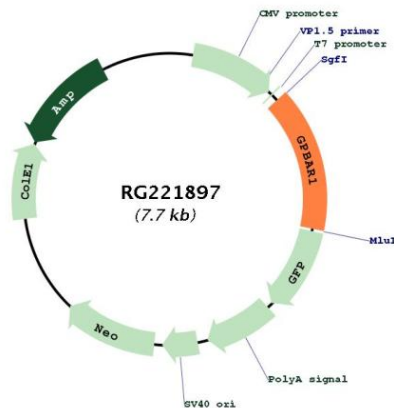
**UniProt ID:** [Q8TDU6](#)

**Cytogenetics:** 2q35

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a member of the G protein-coupled receptor (GPCR) superfamily. This enzyme functions as a cell surface receptor for bile acids. Treatment of cells expressing this GPCR with bile acids induces the production of intracellular cAMP, activation of a MAP kinase signaling pathway, and internalization of the receptor. The receptor is implicated in the suppression of macrophage functions and regulation of energy homeostasis by bile acids. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG221897