

## Product datasheet for **RG226832**

### **GPR56 (ADGRG1) (NM\_001145770) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GPR56 (ADGRG1) (NM_001145770) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADGRG1
Synonyms:	BFPP; BPPR; GPR56; TM7LN4; TM7XN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RG226832 representing NM\_001145770  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACTCCCCAGTCGCTGCTGCAGACGACTGTTCTCTGCTGAGTCTGCTTCTTCTGGTCCAAGGTGCC  
 ACGGCAGGGGCCACAGGGAAGACTTTCGCTTCTGCAGCCAGCGGAACAGACACACAGGAGCAGCTCCA  
 CTACAAACCCACACCAGACTGCGCATCTCCATCGAGAATCCGAAGAGGCCCTCACAGTCCATGCCCT  
 TTCCCTGCAGCCACCCTGCTTCCCGATCCTTCCCTGACCCAGGGGCCTCTACCACTTCTGCCTACT  
 GGAACCGACATGCTGGGAGATTACATCTTCTATGGCAAGCGTGACTTCTTGCTGAGTGACAAAGCCTC  
 TAGCTCCTCTGCTTCCAGCACCAGGAGAGCCTGGCTCAGGGCCCCCGCTGTTAGCCACTTCTGTC  
 ACCTCCTGGTGGAGCCCTCAGAACATCAGCCTGCCAGTGCCGCCAGTTACCTTCTCCTCCACAGTC  
 CTCCCCACACGGCCGCTCACAATGCCTCGGTGGACATGTGCGAGCTCAAAGGGACCTCCAGCTGCTCAG  
 CCAGTTCTGAAGCATCCCCAGAAGGCCCAAGGAGGCCCTCGGCTGCCCGCCAGCCAGCAGTTGCAG  
 AGCCTGGAGTCGAAACTGACCTCTGTGAGATTCATGGGGGACATGGTGTCTTCGAGGAGACCGGATCA  
 ACGCCACGGTGTGGAAGCTCCAGCCACAGCCGGCCTCCAGGACCTGCACATCCACTCCCGGCAGGAGGA  
 GGAGCAGAGCGAGATCATGGAGTACTCGGTGCTGCTGCCTCGAACACTCTTCCAGAGGACGAAAGCCGG  
 AGCGGGGAGGCTGAGAAGAGACTCCTCCTGGTGGACTTACGACGCAAGCCCTGTTCCAGGACAAGAATT  
 CCAGCCAAGTCTGGGTGAGAAGTCTTGGGGATTGTGGTACAGAACACCAAAGTAGCCAACCTCACGGA  
 GCCCGTGGTGTCACTTCCAGCACCAGCTACAGCCGAAGAATGTGACTCTGCAATGTGTGTTCTGGGT  
 GAAGACCCACATTGAGCAGCCCGGGCATTGGAGCAGTGTGGTGTGAGACCGTCAGGAGAGAAACCC  
 AAACATCCTGCTTCTGCAACCATTGACCTACTTGCAGTGTGATGGTCTCCTCGGTGGAGGTGGACGC  
 CGTGCACAAGCACTACCTGAGCCTCCTCCTACGTGGGCTGTGTCGCTCTGCCCTGGCCTGCCTTGT  
 ACCATTGCCGCCTACCTCTGCTCCAGGAGAAACCTCGGGACTACACCATCAAGGTGCACATGAACCTGC  
 TGCTGGCCGCTTCTCTGCTGGACACGAGTTCTGCTCAGCGAGCCGGTGGCCCTGACAGGCTCTGAGGC  
 TGGCTGCCGAGCCAGTGCATCTTCTGCACCTTCTCCTGCTCACCTGCCTTCTCGATGGGCCTCGAG  
 GGGTACAACCTTACCGACTCGTGGTGGAGTCTTGGCACCTATGTCCCTGGCTACCTACTCAAGCTGA  
 GCGCCATGGGCTGGGCTTCCCCATCTTCTGGTACGCTGGTGGCCCTGGTGGATGTGGACAACATGG  
 CCCCATCATCTTGCTGTGCATAGGACTCCAGAGGGCGTCATCTACCCTCCATGTGCTGGATCCGGGAC  
 TCCCTGGTCAGCTACATACCAACCTGGGCCTTTCAGCCTGGTGTCTTCTGTTCAACATGGCCATGCTAG  
 CCACCATGGTGGTGCAGATCCTGCGGCTGCGCCCCACACCCAAAAGTGGTCACATGTGCTGACACTGCT  
 GGGCCTCAGCCTGGTCTTGGCCTGCCCTGGGCCTTGATCTTCTCTCCTTTGCTTCTGGACCTCCAG  
 CTTGTCGTCCTCTACCTTTTCAGCATCATCACCTCCTTCCAAGGCTTCTCATCTTCATCTGGTACTGGT  
 CCATGCGGCTGCAGGCCCGGGTGGCCCTCCCCTCTGAAGAGCAACTCAGACAGCGCCAGGCTCCCCAT  
 CAGCTCGGGCAGCACCTCGTCCAGCCGCATC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG226832 representing NM\_001145770  
 Red=Cloning site Green=Tags(s)

MTPQSLQLQTTFLLLSLLFLVQGAHGRGHREDFRFSQQRNQTHRSSLHYKPTDRLRISIENSEEALTVHAP  
 FPAAHPASRSFPDPRGLYHFCLYWNRHAGRLHLLYGKRDFLSDKASSLLCFQHQEESLAQGPPLLATSV  
 TSWWSPQNISLPSAASF TFSFHSPHTAAHNASVDMCELKRDQLLSQFLKHPQKASRRPSAAPASQQLQ  
 SLESKLT SVRFMGDMVSFEEDRINATVWKLQPTAGLQDLHIHSRQEEEQSEIMEYSVLLPRTLFRQTKGR  
 SGAEAKRLLLVDFFSSQALFQDKNSSQVLGEKVLGI VVQNTKVANLTPVVLT FQHQLQPKNVTLQC VFW  
 EDPTLSSPGHWSSAGCETVRRETQTSCFCNHLTYFAVLMVSSVEVDVAVHKHYLSLLSYVGCVVSAACL  
 TIAAYLCSRRKPRDYTIKVMNLLLAVFLLDTSFLLSEPVALTGSEAGCRASAI FLHFSLLTCLSWMGLE  
 GYNLYRLVVEVFGTYVPGYLLKLSAMGWGFP IFLVTLVALVDVDNYGPIILAVHRTPEGVIYPSMCWIRD  
 SLVSYITNLGLFSLVFLNMAMLATMVVQILRLRPHTQKWSHVL TLLGLSLVGLP WALIFFS FASGT FQ  
 LVVLYLFSIITSFQGLIFIWYWSMRLQARGGPSPLKSNSDSARLPISSGTSSSRI

TRTRPLE - GFP Tag - V

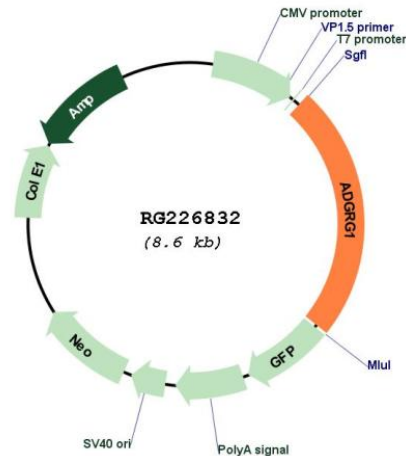
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_001145770

**ORF Size:** 2061 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\\_001145770.3](#)

**RefSeq Size:** 3821 bp

RefSeq ORF:	2064 bp
Locus ID:	9289
UniProt ID:	<a href="#">Q9Y653</a>
Cytogenetics:	16q21
Protein Families:	Druggable Genome, GPCR, Transmembrane
Gene Summary:	<p>This gene encodes a member of the G protein-coupled receptor family and regulates brain cortical patterning. The encoded protein binds specifically to transglutaminase 2, a component of tissue and tumor stroma implicated as an inhibitor of tumor progression. Mutations in this gene are associated with a brain malformation known as bilateral frontoparietal polymicrogyria. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]</p>