

## Product datasheet for **RG218780**

### **GPR56 (ADGRG1) (NM\_201524) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GPR56 (ADGRG1) (NM_201524) 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:

>RG218780 representing NM\_201524  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCC

ATGACTCCCCAGTCGCTGCTGCAGACGACTGTTCTCTGCTGAGTCTGCTTTCCTGGTCCAAGGTGCC  
ACGGCAGGGGCCACAGGGAAGACTTTCGTTCTGCAGCCAGCGGAACCAGACACACAGGAGCAGCCTCCA  
CTACAAACCCACACCAGACCTGCCATCTCCATCGAGAATCCGAAGAGGCCCTCACAGTCCATGCCCT  
TTCCTGCAGCCACCCTGCTTCCCGATCCTTCCCTGACCCAGGGGCCTCTACCACTTCTGCCTACT  
GGAACCGACATGCTGGGAGATTACATCTTCTATGGCAAGCGTGACTTCTTGCTGAGTGACAAAGCCTC  
TAGCTCTCTGCTTCCAGCACCAGGAGAGCCTGGCTCAGGGCCCCCGCTGTTAGCCACTTCTGTC  
ACCTCCTGGTGGAGCCCTCAGAACATCAGCCTGCCAGTGCCGCCAGTTACCTTCTCCTCCACAGTC  
CTCCCCACACGGCCGCTCACAATGCCTCGGTGGACATGTGCGAGCTCAAAGGGACCTCCAGCTGCTCAG  
CCAGTTCTGAAGCATCCCCAGAAGGCCCAAGGAGGCCCTCGGCTGCCCGCCAGCCAGCAGTTGCAG  
AGCCTGGAGTCGAAACTGACCTCTGTGAGATTCATGGGGGACATGGTGTCTTCGAGGAGACCGGATCA  
ACGCCACGGTGTGGAAGCTCCAGCCACAGCCGGCCTCCAGGACCTGCACATCCACTCCCGCAGGAGGA  
GGAGCAGAGCGAGATCATGGAGTACTCGGTGCTGCTGCCTCGAACACTCTTCCAGAGGACGAAAGCCGG  
AGCGGGGAGGCTGAGAAGAGACTCCTCCTGGTGGACTTACGACGCAAGCCCTGTTCCAGGACAAGAATT  
CCAGCCAAGTCTGGGTGAGAAGTCTTGGGGATTGTGGTACAGAACACCAAAGTAGCCAACCTCACGGA  
GCCCGTGGTGTCACTTCCAGCACCAGCTACAGCCGAAGAATGTGACTTGCAATGTGTGTTCTGGGT  
GAAGACCCACATTGAGCAGCCCGGGCATTGGAGCAGTGTGGTGTGAGACCGTCAGGAGAGAAACCC  
AAACATCCTGCTTCTGCAACCATTGACCTACTTGCAGTGTGATGGTCTCCTCGTGGAGGTGGACGC  
CGTGCACAAGCACTACCTGAGCCTCCTCCTACGTGGGCTGTGTCGTCTCGCCCTGGCCTGCCTTGT  
ACCATTGCCGCCTACCTCTGCTCCAGGAGGAAACCTCGGGACTACACCATCAAGGTGCACATGAACCTGC  
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TGGCTGCCGAGCCAGTGCATCTTCTGCACCTTCTCCTGCTCACCTGCCTTTCCTGGATGGGCCTCGAG  
GGGTACAACCTTACCGACTCGTGGTGGAGTCTTGGCACCTATGTCCCTGGCTACCTACTCAAGCTGA  
GCGCCATGGGCTGGGCTTCCCCATCTTCTGGTACGCTGGTGGCCCTGGTGGATGTGGACAACTATGG  
CCCCATCATCTTGGCTGTGCATAGGACTCCAGAGGGCGTCATCTACCCTCCATGTGCTGGATCCGGGAC  
TCCCTGGTCAGCTACATACCAACCTGGGCCTTTCAGCCTGGTGTCTTCTGTTCAACATGGCCATGCTAG  
CCACCATGGTGGTGCAGATCCTGCGGCTGCGCCCCACACCCAAAAGTGGTCACATGTGCTGACACTGCT  
GGGCTCAGCCTGGTCTTGGCCTGCCCTGGGCCTTGATCTTCTCCTTTGCTTCTGGACCTTCCAG  
CTTGTCGTCTCTACCTTTTCAGCATCATCACCTCCTTCCAAGGCTTCTCATCTTCATCTGGTACTGGT  
CCATGCGGCTGCAGGCCCGGGTGGCCCTCCCCTCTGAAGAGCAACTCAGACAGCGCCAGGCTCCCCAT  
CAGCTCGGGCAGCACCTCGTCCAGCCGCATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG218780 representing NM\_201524  
 Red=Cloning site Green=Tags(s)

MTPQSLQTTFLFLLSLLFLVQGAHGRGHREDFRFCQRNQTHRSSLHYKPTDRLRISIENSEEALTVHAP  
 FPAAHPASRSFPDPRGLYHFCLYWNRHAGRLHLLYGKRDFLSDKASSLLCFQHQEESLAQGPPLLATSV  
 TSWWSPQNI SLPSAASF TFSHSPPHTAAHNASVDMCELKRDQLLSQFLKHPQKASRRPSAAPASQQLQ  
 SLESKLT SVRFMGDMVSFEEDRINATVWKLQPTAGLQDLHIHSRQEEEQSEIMEYSVLLPRTLFRQTKGR  
 SGAEAKRLLLVD FSSQALFQDKNSSQVLGEKVLGI VVQNTKVANL TEPVVLTFQHQLQPKNVTLQC VFW  
 EDPTLSSPGHWSSAGCETVRRETQTSCFCNHLTYFAVLMVSSVEVDVAVHKHYLSLLSYVGCVV SALACL  
 TIAAYLCSRRKPRDYTIKVMNLLLAVFLLDTSFLLSEPVALTGSEAGCRASAI FLHFSLLTCLSWMGLE  
 GYNLYRLVVEVFGTYVPGYLLKLSAMGWGFP IFLVTLVALVDVDNYGPIILAVHRTPEGVIYPSMCWIRD  
 SLVSYITNLGLFSLVFLNMAMLATMVVQILRLRPHTQKWSHVL TLLGLSLVGLP WALIFFS FASGTFQ  
 LVVLYLFSIITSFQGLIFIWYWSMRLQARGGPSPLKSNDSARLPISSGTSSSRI

TRTRPLE - GFP Tag - V

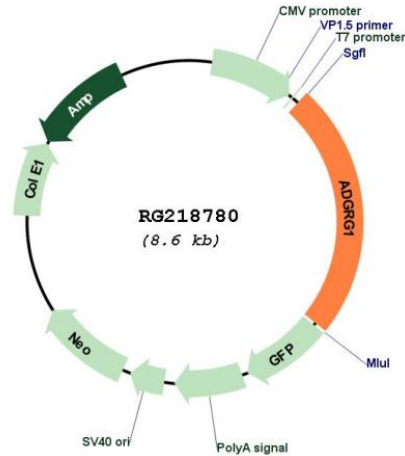
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_201524

**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\\_201524.4](#)

**RefSeq Size:** 3919 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>