

## Product datasheet for **RC238648**

### **GPR56 (ADGRG1) (NM\_001290144) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GPR56 (ADGRG1) (NM_001290144) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADGRG1
Synonyms:	BFPP; BPPR; GPR56; TM7LN4; TM7XN1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RC238648 representing NM\_001290144  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTGCGAGCTCAAAGGGACCTCCAGCTGCTCAGCCAGTTCCTGAAGCATCCCCAGAAGGCCTCAAGGA  
 GGCCCTCGGCTGCCCGCCAGCCAGCAGTTGAGAGCCTGGAGTCGAAACTGACCTCTGTGAGATTCAT  
 GGGGGACATGGTGTCTTCGAGGAGGACCGGATCAACGCCACGGTGTGGAAGCTCCAGCCACAGCCGGC  
 CTCAGGACCTGCACATCCACTCCCGCAGGAGGAGGAGCAGAGCGAGATCATGGAGTACTCGGTGCTGC  
 TGCCTCGAACACTCTCCAGAGGACGAAAGGCCGAGCGGGGAGGCTGAGAAGAGACTCCTCCTGGTGA  
 CTTCAGCAGCCAAGCCCTGTTCCAGGACAAGAATTCCAGCCAAGTCTGGGTGAGAAGGTCTTGGGGATT  
 GTGGTACAGAACACCAAGTAGCCAACCTCACGGAGCCCGTGGTCTCACTTTCCAGCACCAGCTACAGC  
 CGAAGAATGTGACTCTGCAATGTGTGTTCTGGGTTGAAGACCCACATTGAGCAGCCCGGGCATTGGAG  
 CAGTGCTGGGTGTGAGACCGTCAGGAGAGAAACCAACATCCTGCTTCTGCAACCATTGACCTACTTT  
 GCAGTGTGATGGTCTCCTCGGTGGAGGTGGACCGGTGCACAAGCACTACCTGAGCCTCCTCTCCTACG  
 TGGGCTGTGTCGTCTCTGCCCTGGCCTGCCTTGTCAACATTGCCGCTACCTCTGCTCCAGGAGGAAACC  
 TCGGGACTACACCATCAAGGTGCACATGAACCTGCTGCTGGCCGTCTTCTGCTGGACACGAGCTTCCTG  
 CTCAGCGAGCCGGTGGCCCTGACAGGCTCTGAGGCTGGCTGCCGAGCCAGTGCCATCTTCTGCACCTCT  
 CCCTGCTCACCTGCCTTCTGGATGGGCTCGAGGGGTACAACCTCTACCGACTCGTGGTGGAGGTCTT  
 TGGCACCTATGTCCTGGCTACCTACTCAAGCTGAGGCCATGGGCTGGGCTTCCCCATCTTCTGGTG  
 ACGCTGGTGGCCCTGGTGGATGTGGACAACATGGCCCCATCATCTTGGCTGTGCATAGGACTCCAGAGG  
 GCGTCACTACCTTCCATGTGCTGGTCCGGACTCCCTGGTCACTACATACCAACCTGGCCCTCTT  
 CAGCCTGGTGTCTGTTCAACATGGCCATGCTAGCCACCATGGTGGTGCAGATCCTGCGGCTGCGCCCC  
 CACACCCAAAAGTGGTGCATGTGCTGACACTGCTGGCCCTCAGCCTGGTCTTGGCCTGCCCTGGCCCT  
 TGATCTTCTTCTCTTCTGCTTCTGGCACCTTCCAGCTTGTGCTCCTCTACCTTTTTCAGCATCATACCTC  
 CTTCCAAGGCTTCTCATCTTCTGCTACTGGTCCATGCGGCTGCAGGCCCGGGTGGCCCTCCCTC  
 CTGAAGAGCAACTCAGACAGCGCCAGGCTCCCCATCAGCTCGGGCAGCACCTCGTCCAGCCGCATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238648 representing NM\_001290144  
 Red=Cloning site Green=Tags(s)

MCELKRDQLLSQFLKHPQKASRRPSAAPASQQLQSLESKLTSVRFMGDMVSFEEDRINATVWKLQPTAG  
 LQDLHIHSRQEEEQSEIMEYSVLLPRTLFRTKGRSGEAEKRLLLVDFSSQALFQDNSSQVLGEKVLGI  
 VVQNTKVANL TEPVVLTFQHQLQPKNVTLCQVFWVEDPTLSSPGHWSSAGCETVRRETQTSFCFNHLYF  
 AVLMSVSSVEVDVHKHYLSLLSYVGCVVSALACLVTIAAYLCSRRKPRDYTIKVMNLLLAFLDTSFL  
 LSEPVALTGSEAGCRASAIFLHFSLLTCLSWMGLEGYNLYRLVVEVFGTYVPGYLLKLSAMGWGFPFLV  
 TLVALVDVNYGPIILAVHRTPEGVYIPSMCWIRDSLVSYITNLGLFSLVFLFNMLATMVVQILRLRP  
 HTQKWSHVLTLGLSLVGLPWALIFFSFASGTFQLVVLVLSIITSFQGFLLFIWYWSMRLQARGGSPS  
 LKSNSDSARLPISSGSTSSRI

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

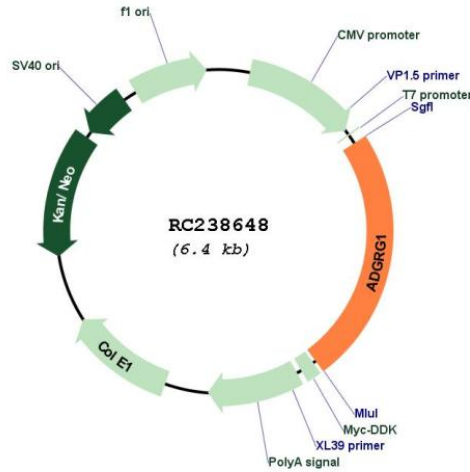
Cloning Scheme:

Cloning sites used for ORF Shutting:



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

Plasmid Map:



<b>ACCN:</b>	NM_001290144
<b>ORF Size:</b>	1536 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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).

**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\\_001290144.2](#)

**RefSeq Size:** 3889 bp

**RefSeq ORF:** 1539 bp

**Locus ID:** 9289

**Cytogenetics:** 16q21

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**MW:** 57.8 kDa

**Gene Summary:** 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]