

## Product datasheet for **RG226920**

### **GPR56 (ADGRG1) (NM\_001145773) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GPR56 (ADGRG1) (NM_001145773) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GPR56
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:**

>RG226920 representing NM\_001145773  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACTCCCCAGTCGCTGCTGCAGACGACACTGTTCTCTGCTGAGTCTGCTCTTCTGGTCCAAGCCTCTG  
 CCTCCTCAGGTGCCACGGCAGGGGCCACAGGGAAGACTTTCGTTCTGCAGCCAGCGGAACCAGACACA  
 CAGGAGCAGCCTCCACTACAAACCACACCAGACTGCGCATCTCCATCGAGAATCCGAAGAGGCCCTC  
 ACAGTCCATGCCCTTTCCCTGCAGCCCACCCTGCTTCCCGATCCTTCCCTGACCCAGGGGCTCTACC  
 ACTTCTGCCTCTACTGGAACCGACATGCTGGGAGATTACATCTTCTCTATGGCAAGCGTGACTTCTTGCT  
 GAGTGACAAAGCCTCTAGCCTCCTGCTTCCAGCACCAGGAGGAGACCTGGCTCAGGGCCCCCGCTG  
 TTAGCCACTTCTGTCACCTCCTGGTGGAGCCCTCAGAACATCAGCCTGCCAGTGCCGCCAGCTTACCT  
 TCTCCTCCACAGTCTCCCCACAGGCCGCTCACAATGCCTCGTGGACATGTGCGAGCTCAAAGGGA  
 CCTCCAGCTGCTCAGCCAGTTCTGAAGCATCCCAGAAGGCCTCAAGGAGGCCCTCGGCTGCCCGGCC  
 AGCCAGCAGTTGCAGAGCCTGGAGTCGAAACTGACCTCTGTGAGATTATGGGGGACATGGTGTCTTCCG  
 AGGAGGACCGGATCAACGCCACGGTGTGGAAGTCCAGCCACAGCCGGCCTCCAGGACCTGCACATCCA  
 CTCCCGCAGGAGGAGGAGCAGAGCGAGATCATGGAGTACTCGGTGCTGCTCGCTCGAACACTCTTCCAG  
 AGGACGAAAGGCCGGAGCGGGGAGGCTGAGAAGAGACTCCTCCTGGTGGACTTCAGCAGCCAAGCCCTGT  
 TCCAGGACAAGAATCCAGCCAAGTCTGGGTGAGAAGTCTTGGGGATTGTGGTACAGAACACCAAAGT  
 AGCCAACCTCACGGAGCCCGTGGTGTCACTTTCAGCACCAGCTACAGCCGAAGAATGTGACTCTGCAA  
 TGTGTGTTCTGGGTTGAAGACCCACATTGAGCAGCCCCGGGCATTGGAGCAGTGTGGGTGTGAGACCG  
 TCAGGAGAGAAACCCAAACATCCTGCTTCTGCAACCCTTGACCTACTTTGCAGTGTGATGGTCTCCTC  
 GGTGGAGGTGGACGCCGTGCACAAGCACTACCTGAGCCTCCTCTCTACGTGGGCTGTGTCGTCTTGCC  
 CTGGCCTGCCTTGTACCATTTGCCGCTACCTCTGCTCCAGGAGGAAACCTCGGGACTACACCATCAAGG  
 TGCACATGAACCTGCTGCTGGCCGTTCTCTGCTGGACACGAGCTTCTGCTCAGCGAGCCGGTGGCCCT  
 GACAGGCTCTGAGGCTGGCTGCCGAGCCAGTGCCATCTTCTGCACTTCTCCCTGCTCACCTGCCTTTCC  
 TGGATGGCCTCGAGGGGTACAACCTCTACCGACTCGTGGTGGAGGTCTTGGCACCTATGTCCCTGGCT  
 ACCTACTCAAGCTGAGCGCCATGGGCTGGGCTTCCCCATCTTCTGGTGACGCTGGTGGCCCTGGTGG  
 TGTGGACAACATGGCCCATCATTTGGCTGTGCATAGGACTCCAGAGGGCGTCATCTACCTTCCATG  
 TGCTGGATCCGGGACTCCCTGGTCAGCTACATACCAACCTGGGCCTCTCAGCCTGGTGTCTTCTGTTCA  
 ACATGGCCATGCTAGCCACCATGGTGGTGCAGATCCTGCGGCTGCGCCCCACACCCAAAAGTGGTCACA  
 TGTGCTGACACTGCTGGGCTCAGCCTGGTCTTGGCCTGCCCTGGGCTTGATCTTCTTCTCCTTTGCT  
 TCTGGCACCTTCCAGTTGTGTCCTCTACCTTTTCAGCATCATCACCTCCTTCCAAGGCTTCTCATCT  
 TCATCTGGTACTGGTCCATGCGGCTGCAGGCCCGGGTGGCCCTCCCCTCTGAAGAGCAACTCAGACAG  
 CGCCAGGCTCCCCATCAGCTCGGGCAGCACCTCGTCCAGCCGCATC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG226920 representing NM\_001145773  
 Red=Cloning site Green=Tags(s)

MTPQSLQTTLLFLLSLLFLVQASASSGAHGRGHREDFRFCSQRNQTHRSSLHYKPTPDLRISIENSEEAL  
 TVHAPFPAHPASRSFPDPRGLYHFCLYWNRHAGRLHLLYGKRDFFLLSDKASSLLCFQHQEESLAQGPPL  
 LATSVTSWWSPQNI SLPSAASF TFSHSPHTAAHNASVDMCELKRDQLLSQFLKHPQASRRPSAAPA  
 SQQLSLESKLT SVRFMGDMVSFEEDRINATVWKLQPTAGLQDLHIHSRQEEEEQSEIMEYSVLLPRTL FQ  
 RTKGRSGEAEKRLLLVDFSSQALFQDKNSSQVLGEKVLGIVVQNTKVANLTPVVLTFQHQLQPKNVTLQ  
 CVFWVEDPTLSSPGHWSSAGCETVRRETQTSCFCNHLTYFAVLMVSSVEVDVAVHKHYL SLLSYVGCVVSA  
 LACLVTIAAYLCSRRKPRDYTIKVMNLLLAVFLLDTSFLLSEPVALTGSEAGCRASAI FLHFSLLTCLS  
 WMGLEGYNLYRLVVEVFGTYVPGYLLKLSAMGWGFIFLVTLVALVDVDNYGPIILAVHRTPEGVIYPSM  
 CWIRDSLVSYITNLGLFSLVFLFNMAMLATMVVQILRLRPHTQKWSHVL TLLGLSLVGLPWALIFFSFA  
 SGTFLVVLVLYFSIITSFQGLIFIWYWSMRLQARGGPSPLKSNSDSARLPISSGSTSSSRI

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001145773

**ORF Size:** 2076 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\\_001145773.3](#)

**RefSeq Size:** 3875 bp

**RefSeq ORF:** 2079 bp

**Locus ID:** 9289

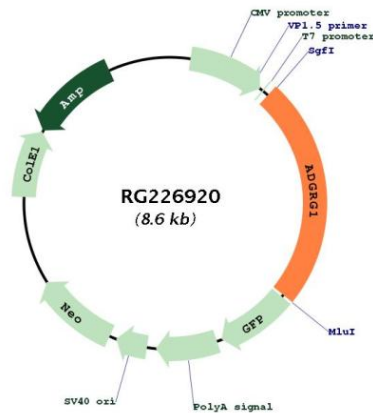
**UniProt ID:** [Q9Y653](#)

**Cytogenetics:** 16q21

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

**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]

### Product images:



Circular map for RG226920