

Product datasheet for **RC200315**

GPR56 (ADGRG1) (NM_005682) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPR56 (ADGRG1) (NM_005682) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPR56
Synonyms:	BFPP; BPPR; GPR56; TM7LN4; TM7XN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC200315 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACTCCCCAGTCGCTGCTGCAGACGACACTGTTCTCTGCTGAGTCTGCTTTCCTGGTCCAAGGTGCC
 ACGGCAGGGGCCACAGGGAAGACTTTCGCTTCTGCAGCCAGCGGAACCAGACACACAGGAGCAGCCTCCA
 CTACAAACCCACACCAGACCTGCGCATCTCCATCGAGAATCCGAAGAGGCCCTCACAGTCCATGCCCT
 TTCCCTGCAGCCACCCTGCTTCCCGATCCTTCCCTGACCCAGGGGCCTCTACCACTTCTGCCTTACT
 GGAACCGACATGCTGGGAGATTACATCTTCTATGGCAAGCGTGACTTCTTGCTGAGTGACAAAGCCTC
 TAGCCTCCTCTGCTTCCAGCACCAGGAGAGCCTGGCTCAGGGCCCCCGCTGTTAGCCACTTCTGTC
 ACCTCCTGGTGGAGCCCTCAGAACATCAGCCTGCCAGTGCCGCCAGTTACCTTCTCCTCCACAGTC
 CTCCCACACGGCCGCTCACAATGCCTCGGTGGACATGTGCGAGCTCAAAGGGACCTCCAGCTGCTCAG
 CCAGTTCTGAAGCATCCCAGAAGGCCTCAAGGAGGCCCTCGGCTGCCCGCCAGCCAGCAGTTGCAG
 AGCCTGGAGTCGAAACTGACCTCTGTGAGATTCATGGGGGACATGGTGTCTTCGAGGAGACCGGATCA
 ACGCCACGGTGTGGAAGCTCCAGCCACAGCCGGCCTCCAGGACCTGCACATCCACTCCCGCAGGAGGA
 GGAGCAGAGCGAGATCATGGAGTACTCGGTGCTGCTGCCTCGAACACTCTTCCAGAGGACGAAAGCCGG
 AGCGGGGAGGCTGAGAAGAGACTCCTCCTGGTGGACTTACGACAGCAAGCCCTGTTCCAGGACAAGAATT
 CCAGCCACGTCTGGGTGAGAAGTCTTGGGGATTGTGGTACAGAACACCAAAGTAGCCAACCTCACGGA
 GCCCGTGGTGCTCACCTCCAGCACCAGCTACAGCCGAAGAATGTGACTTGCAATGTGTGTTCTGGGT
 GAAGACCCACATTGAGCAGCCCGGGCATTGGAGCAGTGTGGTGTGAGACCGTCAGGAGAGAAAACCC
 AAACATCCTGCTTCTGCAACCATTGACCTACTTTGCAGTGTGATGGTCTCCTCGGTGGAGGTGGACGC
 CGTGCACAAGCACTACCTGAGCCTCCTCCTACGTGGGCTGTGTCGTCTCGCCCTGGCCTGCCTTGTG
 ACCATTGCCCGCTACCTCTGCTCCAGGGTGCCCTGCCGTGCAGGAGGAAACCTCGGGACTACACCATCA
 AGGTGCACATGAACCTGCTGCTGGCCGTCTTCTGCTGGACACGAGCTTCTGCTCAGCGAGCCGGTGGC
 CCTGACAGGCTCTGAGGCTGGCTGCCGAGCCAGTGCCATCTTCTGCACTTCTCCTGCTCACCTGCCTT
 TCCTGGATGGGCCTCGAGGGGTACAACCTTACCAGCTCGTGGTGGAGGTCTTGGCACCTATGTCCCTG
 GCTACCTACTCAAGCTGAGCGCCATGGGCTGGGCTTCCCCTCTTCTGGTGACGCTGGTGGCCCTGGT
 GGATGTGGACAACTATGGCCCCATCATCTTGGCTGTGCATAGGACTCCAGAGGGCGTCATCTACCCTTC
 ATGTGCTGGATCCGGACTCCCTGGTCACTACATCACCACCTGGGCTTTCAGCCTGGTGTCTTCTGT
 TCAACATGGCCATGCTAGCCACCATGGTGGTGCAGATCCTGCGGCTGCGCCCCACACCCAAAAGTGGTC
 ACATGTGCTGACTGCTGGGCCTCAGCCTGGTCTTGGCCTGCCCTGGGCCTTGATCTTCTTCTCCTT
 GCTTCTGGCACCTTCCAGCTTGTGTCCTTACCTTTTCAGCATCATCACCTCCTTCCAAGGCTTCTCTCA
 TCTTACTTGGTACTGGTCCATGCGGCTGCAGGCCGGGTGGCCCTCCCTCTGAAGAGCAACTCAGA
 CAGCGCCAGGCTCCCATCAGCTCGGGCAGCACCTCGTCCAGCCGCATC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200315 protein sequence
Red=Cloning site Green=Tags(s)

MTPQSLQLQTTLFLLSLLFLVQGAHGRGHREDFRQCQRNQTHRSSLHYKPTPDLRISIENSEEALTVHAP
 FPAAHPASRSFPDPRGLYHFCLYWNRHAGRLHLLYGKRDFLSDKASSLLCFQHQEESLAQGPPLLATSV
 TSWWSPQNI SLPSAASF TFSFHSPHTAAHNASVDMCELKRDQLLSQFLKHPQKASRRPSAAPASQQLQ
 SLESKLT S VRFMGDMVSFEEDRINATVWKLQPTAGLQDLHIHSRQEEEQSEIMEYSVLLPRTLRFQRTKGR
 SGAEAKRLLLVDFFSQALFQDKNSSHVLGEKVLGIVVQNTKVANLTPVVLTTFQHQLQPKNVTLQCVFWV
 EDPTLSSPGHWSAGCETVRRETQTSFCNHLTYFAVLMVSSVEVDVAVHKHYLSLLSYVGCVVSALACL
 TIAAYLCSRVP LPCRPRDYTIKVMNLLAVFLDTSFLLSEPVALTGSEAGCRASAI FLHFSLLTCL
 SWMGLEGYNLYRLVVEVFGTYVPGYLLKLSAMGWGFIFLVTLVALVDVNYGPIILAVHRTPEGVIYPS
 MCWIRDSLVSYITNLGLFSLVLFNMAMLATMVVQILRLRPHTQKWSHVL TLLGLSLVLGLPWALIFFSF
 ASGTFQLVVLVLF SIIITSFQGLIFIWYWSMLQARGGPSPLKSNDSARLP ISSGSTSSSRI

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6156_c08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005682

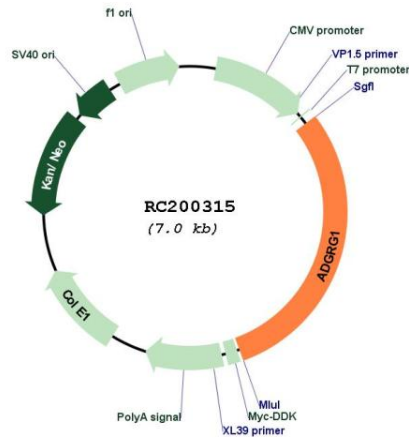
ORF Size: 2079 bp

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](#)

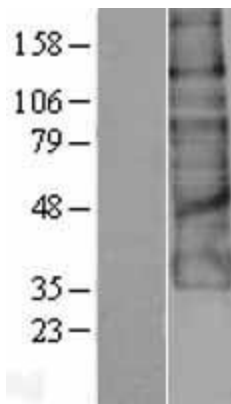
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005682.3
RefSeq Size:	3831 bp
RefSeq ORF:	2082 bp
Locus ID:	9289
UniProt ID:	Q9Y653
Cytogenetics:	16q21
Domains:	GPS, 7tm_2
Protein Families:	Druggable Genome, GPCR, Transmembrane
MW:	77.7 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]

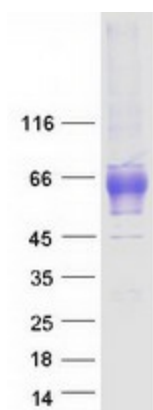
Product images:



Circular map for RC200315



Western blot validation of overexpression lysate (Cat# [LY428998]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226861] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADGRG1 protein (Cat# [TP300315]). The protein was produced from HEK293T cells transfected with ADGRG1 cDNA clone (Cat# RC200315) using MegaTran 2.0 (Cat# [TT210002]).