

Product datasheet for RR212625

Gpr18 (NM_001079710) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Gpr18 (NM_001079710) Rat Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Gpr18
 Synonyms: MGC156838
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RR212625 representing NM_001079710
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCATCCCGAGCAATCGCGACCAGCTTGCTCTTTCCAATGGTTCACACCCAGAGGAATACAAAATCG
 CAGCCCTGGTCTTCTACAGCTGCATCTTCTGATTGGGCTGCTTGTTAATGTCAGCTGCCATGTTT
 CAGCTGTACGACCAAGAAAAGAACCACCGTAACCATCTACATGATGAACGTCGACTGCTGGACTTAGTA
 TTTATACTGAGTCTACCCTTTCCGATGTTTTACTATGCAAAGGCGAGTGGCCATTTGGAGACTACTTCT
 GCCACATTCTTGGGGCCCTGGTGGTGTTTTACCAAGCCTTGCTCTGTGGCTTCTTGCTCTCATTAGTGC
 TGACAGATACATGGCCATAGTACAGCCGAAATACGCCAAGGAACCTCAAGAACACTGGCAAGCGGTGCTC
 CGGTGTGTGGGGTCTGGATAATGACCCTGACCACCCTGTCCTCTGCTACTGCTCGATGAAGACCCAG
 ATAAGGCCTCCTCCCGGCCACCTGCCTGAAGATCTCCGACATCATCCACTTAAAAGCTGTCAATGTGCT
 TAACCTTACGCGACTCATATTTTCTTCTGATCCCTCTGTTTCATCATGATCGGGTGTACGTGGTCATC
 ATTCACAGCCTCCTCCGCGGCAGACGTCTAAGCTGAAGCCCAAGGTCAAGGAGAAGTCCATACGGATCA
 TCGTCACGCTCCTGCTGCAGGTGCTTGCCTGCTTCGTGCCCTCCACATCTGTTTTGCTCTCCTGATGCT
 ACAGGGGAGGAGAACAGCTACAGCCCCGAGGAGCCTTACCACCTTCCATGAACCTCAGCACGTGT
 CTCGACGTCGTTCTACTACTATTGTTTTCAAACAGTTCAGGCTCGAGTCATCAGTGTCTGCTGTACC
 GCAATTACCTTCGAGTGTGCGCAGAAAAGTGTCCGGTCAGGCAGTCTACGGTCACTTAGCAACATGAA
 CAGTGAATGCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RR212625 representing NM_001079710
Red=Cloning site Green=Tags(s)

MAIPSNRDQLALSNGSHPEEYKIAALVFYSCIFLIGLLVNVLTALWVFSCTTKRRTVTIYMMNVALLDLV
 FILSLPFRMFYYAKGEWPFGDYFCHILGALVVFYPSLALWLLALISADRYMAIVQPKYAKELKNTGKAVL
 ACVGVWIMTLTTTVPLLLDDEDPDKASSPATCLKISDIHLKAVNVLFNTRLIFFFLIPLFIMIGCYVVI
 IHSLLRGQTSKLPKVKKEKSIRIIVTLLQLVACFVPHICFALLMLQGEENSYSYPWGAFITFLMNLSTC
 LDVVLYIYVSKQFQARVISVMLYRNYLRSVRRKSVRSGLRSLSNMNSEML

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja3089_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001079710

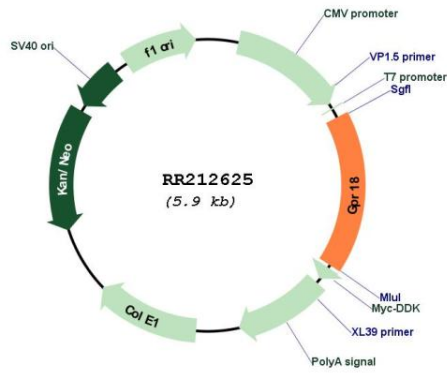
ORF Size: 993 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.
RefSeq:	<u>NM_001079710.1</u> , <u>NP_001073178.1</u>
RefSeq Size:	1357 bp
RefSeq ORF:	996 bp
Locus ID:	679957
UniProt ID:	<u>A1A5S3</u>
Cytogenetics:	15q25
MW:	37.6 kDa
Gene Summary:	Receptor for endocannabinoid N-arachidonyl glycine (NAGly) (PubMed:24431468). However, conflicting results about the role of NAGly as an agonist are reported (By similarity). Can also be activated by plant-derived and synthetic cannabinoid agonists (PubMed:24431468). The activity of this receptor is mediated by G proteins which inhibit adenylyl cyclase (By similarity). May contribute to regulation of the immune system (By similarity). Is required for normal homeostasis of CD8+ subsets of intraepithelial lymphocytes (IELs) (CD8alphaalpha and CD8alphabeta IELs) in small intestine by supporting preferential migration of CD8alphaalpha T-cells to intraepithelial compartment over lamina propria compartment, and by mediating their reconstitution into small intestine after bone marrow transplant (By similarity). Plays a role in hypotensive responses, mediating reduction in intraocular and blood pressure (PubMed:24431468). Mediates NAGly-induced process of reorganization of actin filaments and induction of acrosomal exocytosis (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR212625