

Product datasheet for RC217482

GPR18 (NM_001098200) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPR18 (NM_001098200) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPR18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217482 representing NM_001098200 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCACCCCTGAACAATCAAGATCAACCTGTCCCTTTAACAGCTCACATCCAGATGAATACAAAATTG
CAGCCCTGTCTTCTATAGCTGTATCTTCATAATTGGATTATTTGTTAACATCACTGCATTATGGGTTTT
CAGTTGTACCACCAAGAAGAGAACCACGGTAACCATCTATATGATGAATGTGGCATTAGTGGACTTGATA
TTTATAATGACTTTACCCCTTCGAATGTTTTATTATGCAAAGATGAATGGCCATTTGGAGAGTACTTCT
GCCAGATTCTTGGAGCTCACAGTGTTTTACCCAAGCATTGCTTTATGGCTTCTTGCCTTTATTAGTGC
TGACAGATACATGGCCATTGTACAGCCGAAGTACGCCAAAGAAGTAAAAACACGTGCAAAGCCGTGCTG
GCGTGTGTGGGAGTCTGGATAATGACCCTGACCACGACCACCCCTCTGCTACTGCTCTATAAAGACCCAG
ATAAAGACTCCACTCCCACCCTGCCTCAAGATTTCTGACATCATCTATCTAAAAGCTGTGAACGTGCT
GAACCTCACTCGACTGACATTTTTTTCTTGATTCCTTTGTTTCATCATGATTGGGTGCTACTTGGTCATT
ATTCATAATCTCCTTCACGGCAGGACGTCTAAGCTGAAACCCAAAGTCAAGGAGAAGTCCATAAGGATCA
TCATCACGCTGCTGGTGCAGGTGCTCGTCTGCTTTATGCCCTCCACATCTGTTTCGCTTTCCTGATGCT
GGGAACGGGGGAGAACAGTTACAATCCCTGGGGAGCCTTACCACCTTCCATGAACCTCAGCACGTGT
CTGGATGTGATTCTACTACATCGTTTTCAAACAATTTCAAGCTCGAGTCATTAGTGTCATGCTATAACC
GTAAATACCTTCAAGCATGCGCAGAAAAGTTCCGATCTGGTAGTCTACGGTCACTAAGCAATATAAA
CAGTGAATGTTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC217482 representing NM_001098200
 Red=Cloning site Green=Tags(s)

MITLNNQDPVPFNSSHPDEYKIAALVFYSCIFIIGL FVNITALWVFSCTTKRRTVTIYMMNVALVDLI
 FIMTLPRFMFYAKDEWPFGEYFCQILGALTVFYPSIALWLLAFISADRYMAIVQPKYAKELKNTCKAVL
 ACVGVWIMTLTTTTPLLLLYKDPDKDSTPATCLKISDIIYLKAVNVNLNLTTRLTFFFLIPLFIMIGCYLVI
 IHNLLHGRTSKLKPVKVEKSIRIIITLLVQVLVCFMPFHICFAFLMLGTGENSYNPWGAFITFLMNLSTC
 LDVILYYIVSKQFQARVISVMLYRNYLRSMRRKSFRRSGSLRSLSNINSEML

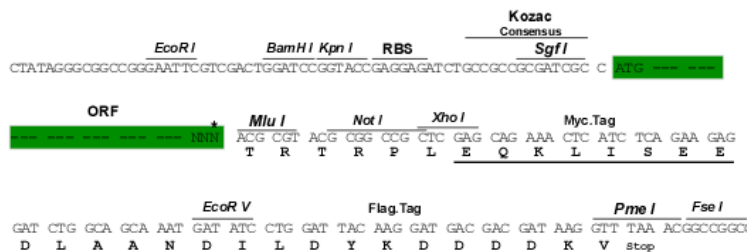
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6500_a07.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001098200

ORF Size: 993 bp

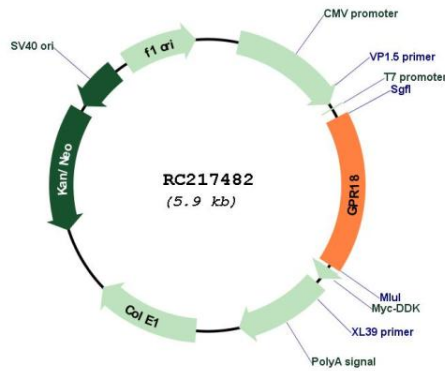
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

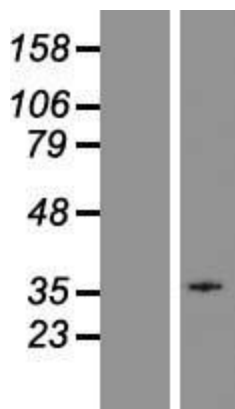
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
RefSeq:	NM_001098200.1 , NP_001091670.1
RefSeq Size:	1484 bp
RefSeq ORF:	996 bp
Locus ID:	2841
UniProt ID:	Q14330
Cytogenetics:	13q32.3
Protein Families:	Druggable Genome, GPCR, Transmembrane
MW:	38 kDa
Gene Summary:	Receptor for endocannabinoid N-arachidonyl glycine (NAGly) (PubMed:16844083, PubMed:24762058, PubMed:27572937). However, conflicting results about the role of NAGly as an agonist are reported (PubMed:27018161). Can also be activated by plant-derived and synthetic cannabinoid agonists (PubMed:24762058). The activity of this receptor is mediated by G proteins which inhibit adenylyl cyclase (PubMed:16844083). May contribute to regulation of the immune system. 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 (By similarity). Mediates NAGly-induced process of reorganization of actin filaments and induction of acrosomal exocytosis (PubMed:27572937). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC217482



Western blot validation of overexpression lysate (Cat# [LY420549]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217482 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).