

Product datasheet for **MR204893**

Gpr18 (NM_182806) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gpr18 (NM_182806) Mouse 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:	>MR204893 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCACCCTGAGCAATCACAACCAGCTTGATCTTTCTAATGGCTCACACCCAGAGGAATACAAAATCG
CAGCCCTAGTCTTCTACAGCTGCATCTTCTGATTGGGCTGTTTGTAAATGTCACCTGCGTTGTTGGGTTTT
CAGCTGTACGACCAAGAAAAGAACCACAGTGACCATCTACATGATGAACGTTGCACTACTGGACCTCGTA
TTTATACTCAGTCTGCCCTTTCCGATGTTTTACTATGCAAAAGGCGAGTGGCCATTTGGAGAGTACTTCT
GCCACATTTGGGGCCCTGGTGGTGTTTACCCAAGCCTCGCTCTGTGGCTTCTTGCTTTCATTAGTGC
TGACAGATACATGGCCATCGTACAGCCAAAATATGCCAAGGAGCTGAAGAACACCGCAAGGCCGCTGCTT
CGGTGTGGGGGGTCTGGTAATGACCCTGACCACCACTGTCCCCTGCTACTGCTCTACGAAGACCCAG
ACAAGGCTCCTCCCGGCCACCTGCCTGAAGATCTCCGACATCACCCACTTAAAAGCTGTCAACGTGCT
CAACTTCACGCGACTCATATTTTTCTTCTGATCCCTTTGTTTCATCATGATCGGGTGTACGTGGTCATC
ATTCACAGTCTCCTCCGAGGGCAGACGTCTAAGCTGAAGCCCAAGGTCAGGAGAAGTCCATACGGATCA
TCATGACCCTCCTGCTGCAGGTGCTCGTCTGCTTCGTGCCCTCCACATCTGCTTTGCCGCTCCTGATGCT
ACAAGGACAGGAGAACAGCTATAGCCCCTGGGGAGCCTTACCACCTTCCATGAACCTCAGCACCTGT
CTCGATGTAGTCTCTACTACATCGTTTTCAAACAGTTCAGGCTCGAGTCATCAGCGTCATGCTGTACC
GCAATTACCTTCGAGTGTTCGAGAAAAGTGTCCGATCGGGCAGTTTACGGTCACTTAGCAACATGAA
CAGTGAGATGCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR204893 protein sequence
Red=Cloning site Green=Tags(s)

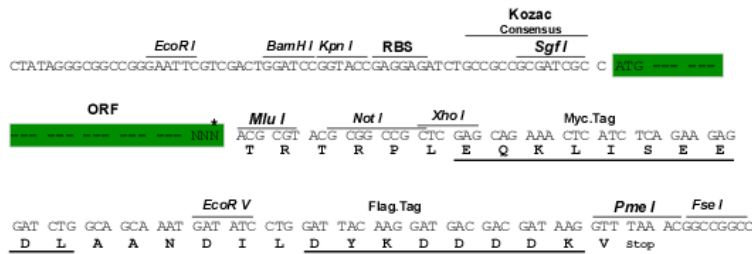
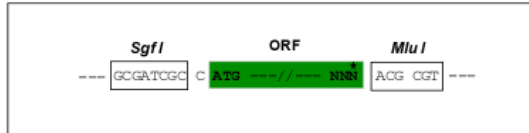
MATLSNHNQLDLNNGSHPEEYKIAALVFYSCIFLIGLFVNVTALWVFSCTTKRRTVTIYMMNVALLDLV
 FILSLPFRMFYYAKGEWPFGEYFCHILGALVVFYPSLALWLLAFISADRYMAIVQPKYAKELKNTGKAVL
 ACGGVWVMTLTTTVPLLLLYEDPKASSPATCLKISDITHLKAVNVLNFTLIFFFLIPLFIMIGCYVVI
 IHSLLRGQTSKLPKVKKEKSIRIIMTLLQLVCFVPHICFVAVLMLQGQENSYSYPWGAFITFLMNLSTC
 LDVVLYIYVSKQFQARVISVMLYRNYLRSVRRKSVRSGLRSLSNMNSEML

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_182806

ORF Size: 996 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_182806.1](#), [NP_877958.1](#)

RefSeq Size: 1334 bp

RefSeq ORF: 996 bp

Locus ID: 110168

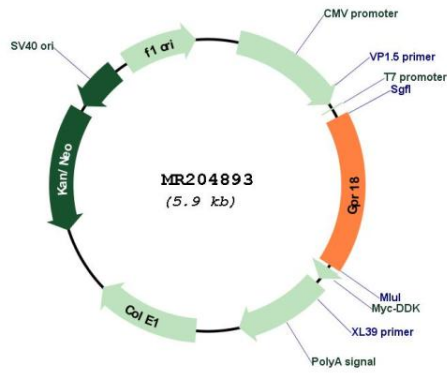
UniProt ID: [Q8K1Z6](#)

Cytogenetics: 14 65.86 cM

MW: 37.7 kDa

Gene Summary: Receptor for endocannabinoid N-arachidonyl glycine (NAGly) (By similarity). However, conflicting results about the role of NAGly as an agonist are reported (PubMed:23104136). Can also be activated by plant-derived and synthetic cannabinoid agonists (By similarity). 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 (PubMed:25348153, PubMed:26197390). Plays a role in hypotensive responses, mediating reduction in intraocular and blood pressure (PubMed:23461720, PubMed:27893106). 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 MR204893