

## Product datasheet for RC214800

### GPR136 (OPN5) (NM\_181744) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GPR136 (OPN5) (NM_181744) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPR136
Synonyms:	GPR136; GRP136; PGR12; TMEM13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214800 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGTTAAATCACACTGCCCTGCCTCAGGACGAGCGCCTGCCCATACCTTCGAGATGGGGATCCTT  
TTGCTTCCAACTTTCTGGGAAGCGGATTTAGTGGCTGGCTTTACCTAACAAATAATTGGGATTCTGTC  
CACATTTGGAAATGGATATGTCCTTTACATGTCTTCTAGACGAAAGAAGAAGCTGAGACCCGCTGAAATA  
ATGACTATCAATTTAGCAGTCTGTGATCTGGGGATTTAGTTGTAGGCAAGCCGTTACCATCATCTCTT  
GCTTTTGTACCCTGGGTGTTGGCTGGATCGGCTGCCGCTGGTATGGATGGGCTGGATTTTCTTTGG  
CTGTGGAAGCCTTATACCATGACTGCTGTGAGCCTGGATCGATATTTGAAAATCTGCTATTTATCTTAT  
GGGTTTTGGCTGAAAAGAAAGCACGCCTACATCTGCCTGGCAGCCATCTGGGCCTATGCTTCCTTCTGGA  
CCACCATGCCCTTGGTAGGTCTGGGGGACTACGTACCTGAGCCCTTCGGAACCTCGTGCACCCTGGACTG  
GTGGCTGGCCAGGCCTCGGTAGGGGGCCAGGTTTTATCCTGAACATCCTCTTCTGCTCCTTGGCTC  
CCAACGGCTGTGATCGTGTCTCCTACGTAAGATCATTGCCAAGGTTAAGTCCTTCCAAAGAAGTAG  
CTCATTTGACAGTCGGATCCATAGCAGCCATGTGCTGGAATGAAACTGACAAAGGTAGCGATGTTGAT  
TTGTGCTGGATTCTGATTGCCTGGATTCTTATGCAGTGGTGTCTGTGTGGTCAGCTTTTGAAGGCCA  
GACTCCATCCCATACAGCTCTGTGGTGCCAACCCTACTGCAAATCTGCAGCGATGTACAATCCCA  
TCATTTACCAAGTTATTGATTACAAATTTGCCTGTTGCCAACTGGTGGTTTGAAGCAACCAAGAAGAA  
GTCTCTGGAAGGCTTCAGGCTGCACCCGTAACCACAGTCAGGAAGTCTTCTGCTGTGCTGGAAATTCAT  
GAAGAGTGGGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC214800 protein sequence  
Red=Cloning site Green=Tags(s)

MALNHTALPQDERLPHYL RDGDPFASKLSWEADLVAGFYLTIIIGILSTFGNGYVLYMSSRRKKLRPAEI  
 MTINLAVCDLGISVVGKPFITIIISCFCHRWFVWIGCRWYWGAGFFFGCSLITMTAVSLDRYLKICYLSY  
 GVWLKRKHAYICLAAIWAYASFWTMPLVGLGDYVPEPFGTSCTLDWLLAQASVGGQVFILNILFFCLLL  
 PTAVIVFSYVKIIIAKVKSSSKEVAHFDSRIHSSHVLEMKLT KVAMLICAGFLIAWIPYAVVSVWSAFGRP  
 DSIPQLSVPVPTLLAKSAAMYNPIIYQVIDYKFACCQTGGLKATKKKSLEGFRLHTVTTVRKSSAVLEIH  
 EEW E

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6465\\_b01.zip](https://cdn.origene.com/chromatograms/mk6465_b01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_181744

**ORF Size:** 1062 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\\_181744.3](#)

**RefSeq Size:** 3496 bp

**RefSeq ORF:** 1065 bp

**Locus ID:** 221391

**UniProt ID:** [Q6U736](#)

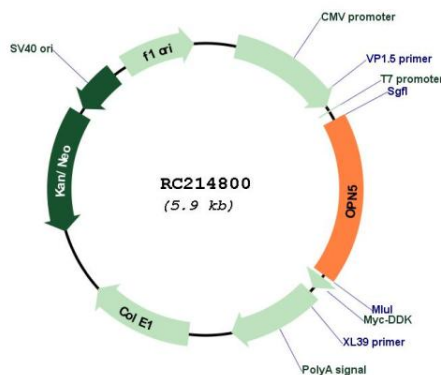
**Cytogenetics:** 6p12.3

**Protein Families:** Druggable Genome, Transmembrane

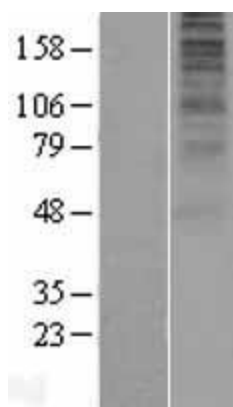
**MW:** 39.7 kDa

**Gene Summary:** Opsins are members of the guanine nucleotide-binding protein (G protein)-coupled receptor superfamily. This opsin gene is expressed in the eye, brain, testes, and spinal cord. This gene belongs to the seven-exon subfamily of mammalian opsin genes that includes peropsin (RRH) and retinal G protein coupled receptor (RGR). Like these other seven-exon opsin genes, this family member may encode a protein with photoisomerase activity. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2010]

## Product images:



Circular map for RC214800



Western blot validation of overexpression lysate (Cat# [LY405647]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214800 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).