

## Product datasheet for RC209671

### GPR45 (NM\_007227) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GPR45 (NM_007227) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPR45
Synonyms:	PSP24; PSP24(ALPHA); PSP24A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209671 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTGCAACAGCACGTCCCTTGAGGCTTACACATACCTGCTGCTGAACACCAGCAACGCCTCAGACT  
CGGGGTCCACCCAGTTGCCCGCACCCCTCAGGATCTCCTTGCCATAGTGATGCTGCTGATGACCGTGGT  
GGGTTCTCGGCAACACTGTGGCTGCATCATCGTGTACCAGAGCGCGCTATGCGCTCGGCCATCAAC  
CTGCTGCTGGCCACCCTGGCCTTCTCCGACATCATGCTGTCCCTCTGCTGCATGCCCTTCACCGCCGTC  
CCCTCATACCCGTGCGCTGGCACTTTGGGACCCTTCTGCCGCTCTCAGCCACGCTCTACTGGTTTTT  
TGTCTGGAGGGCGTGGCCATCCTGCTCATCATCAGCGTGGACCGCTTCCATCATCGTCCAGCGCCAG  
GACAAGCTGAACCCGCGCAGGGCAAGGTGATCATCGCGTCTCCTGGGTGCTGTCTTCTGCATCGCGG  
GGCCCTCGCTCACGGGCTGGACGCTGGTGGAGGTGCCGGCGGGGCCACAGTGCCTGCTGGGCTACAC  
GGAGCTCCCCGCTGACCGCGCTACGTGGTACCTTGGTGGTGGCCGTGTTCTTCGCGCCCTTTGGCGTC  
ATGCTGTGCGCTACATGTGCATCCTCAACACGGTCCGCAAGAACGCCGTGCGCGTGACAACAGTCGG  
ACAGCTGGACCTGCGGCAGCTCACCAGGGCGGGCCTGCGGCGCTGCAGCGGACGCAACAGGTACGCT  
GGACTTGAGCTTCAAGACCAAGGCCTTACCACCATCTGATCCTCTTCGTTGGGCTTCTCCCTCTGCTGG  
CTGCCCACTCCGCTACAGCCTCCTGTCTGTGTTTAGCCAGCGCTTTACTGCGGTTCTCCTTCTACG  
CCACCAGCACCTGCGTCTGTGGCTCAGTTACCTCAAGTCCGTCTTCAACCCATCGTCTACTGCTGGAG  
AATCAAAAAATTCCGCGAGGCCTGCATAGAGTTGCTGCCCCAGACCTTCAAATCCTCCCAAAGTGCCT  
GAGCGGATCCGAAGGAGAATCCAGCCAAGCACAGTCTACGTGTGCAATGAAAACAGTCTGCGGTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC209671 protein sequence  
 Red=Cloning site Green=Tags(s)

MACNSTSLEAYTYLLNLSNASDSGSTQLPAPLRISLAIVMLMTVVGFLGNTVVCIIIVYQRPAMRSAIN  
 LLLATLAFSDIMLSLCCMPFTAVTLITVRWHFGDHFCLSATLYWFFVLEGVAILLIISVDRFLIIVQRQ  
 DKLNPRRAKVIIAVSWVLSFCIAGPSLTGWTLVEVAPAPQCVLGYTELPADRAYVVTLLVAVFFAPFGV  
 MLCAYMCILNTVRKNAVRVHNQSDSLDLRQLTRAGLRRLLQRQQVSVDLSEFKTKAFTTILILFVGFSLCW  
 LPHSVYSLLSVFSQRFYCGSSFYATSTCVLWLSYLKSVFNPIVYCWRIKKFREACIELLPQTFQILPKVP  
 ERIRRRRIQPSTVYVCNENQSAV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6087\\_h03.zip](https://cdn.origene.com/chromatograms/mk6087_h03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_007227

**ORF Size:** 1116 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\\_007227.3](#), [NP\\_009158.3](#)

**RefSeq Size:** 1725 bp

**RefSeq ORF:** 1119 bp

**Locus ID:** 11250

**UniProt ID:** [Q9Y5Y3](#)

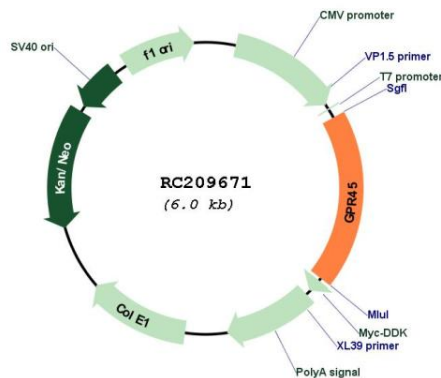
**Cytogenetics:** 2q12.1

**Protein Families:** Druggable Genome, GPCR, Transmembrane

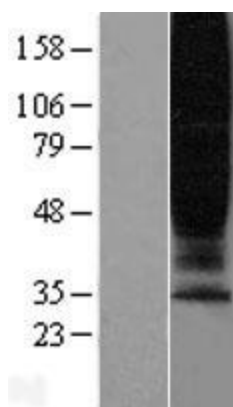
**MW:** 42 kDa

**Gene Summary:** This intronless gene encodes a member of the G protein-coupled receptor (GPCR) family. Members of this protein family contain seven putative transmembrane domains and may mediate signaling processes to the interior of the cell via activation of heterotrimeric G proteins. This protein may function in the central nervous system. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC209671



Western blot validation of overexpression lysate (Cat# [LY416114]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209671 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).