

## Product datasheet for RC209677

### NPBWR2 (NM\_005286) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NPBWR2 (NM_005286) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NPBWR2
Synonyms:	GPR8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209677 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGGCCGCTGGGCACCCAGAGCCCCTTGACAGCAGGGGCTCCTTCTCCCTCCCCACGATGGGTGCCA  
ACGTCTCTCAGGACAATGGCACTGGCCACAATGCCACCTTCTCCGAGCCACTGCCGTTCTCTATGTGCT  
CCTGCCCGCGTGTACTCCGGGATCTGTGCTGTGGGGCTGACTGGCAACACGGCCGTCATCCTTGAATC  
CTAAGGGCGCCAAGATGAAGACGGTGACCAACGTGTTTCATCCTGAACCTGGCCGTCGCCGACGGGCTCT  
TCACGCTGGTACTGCCTGTCAACATCGCGGAGCACCTGCTGCAGTACTGGCCCTTCGGGGAGCTGCTCTG  
CAAGCTGGTGCTGGCCGTCGACCACTACAACATCTTCTCCAGCATCTACTTCTAGCCGATGAGCGTG  
GACCGATACCTGGTGGTCTGGCCACCGTGAGGTCCCAGCACATGCCCTGGCGCACCTACCGGGGGCGA  
AGGTGCGCAGCCTGTGTCTGGCTGGGCGTCACGGTCTGGTCTGCCCTTCTTCTCTTTCGCTGGCGT  
CTACAGCAACGAGCTGCAGGTCCCAAGCTGTGGGCTGAGCTTCCCGTGGCCCGAGCAGGTCTGGTCAAG  
GCCAGCCGTGTCTACACGTTGGTCTGGGCTTCGTGCTGCCCGTGTGCACCATCTGTGTGCTCTACACAG  
ACCTCTGCGCAGGCTGCGGGCCGTGCGGCTCCGCTCTGGAGCCAAGGCTCTAGGCAAGGCCAGGCGGAA  
GGTGACCGTCTGGTCTCGTGTGCTGGCCGTGTGCCTCTGCTGGACGCCCTTCCACTGGCCTCT  
GTCGTGGCCCTGACCACGGACCTGCCCCAGACCCCACTGGTCATCAGTATGTCTACGTCATCACCAGCC  
TCAGCTACGCCAACTCGTGCTGAACCCCTTCTCTACGCCTTCTAGATGACAACCTCCGGAAGAACTT  
CCGACGATATTGCGGTGCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC209677 protein sequence  
Red=Cloning site Green=Tags(s)

MQAAGHPEPLDSRGSFSLPTMGANVSQDNGTGHNATFSEPLPFLYVLLPAVYSGICAVGLTGNTAVILVI  
 LRAPKMKTVTNVFI LNLA VADGLFTLVLPV NIAEHL LQYWPFGELLCKL VLAVDHYNIFSS IYFLAVMSV  
 DRYLVV LATAVRSRHMPWR TYRGAKVASL CVWLGVTVLVLPFFS FAGVYSNELQVPSCGLSFPWPQE QWFK  
 ASRVYTLV LGFVLPVCTICVLYTDLLRRLRAVRLRSGAKALGKARRKVTVLV LVLAVCLLCWTPPHLAS  
 VVALTTDLPQTPLVISMSYVITSLSYANSCLNPFLYAFLLDDNF RKNFRSILRC

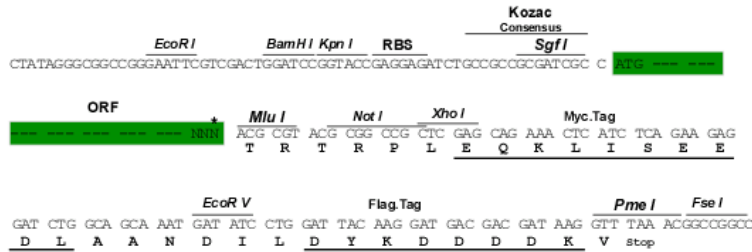
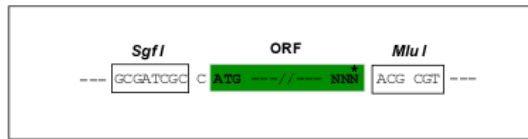
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6148\\_b11.zip](https://cdn.origene.com/chromatograms/mk6148_b11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_005286

**ORF Size:** 1001 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\\_005286.4](#)

**RefSeq Size:** 1002 bp

**RefSeq ORF:** 1002 bp

**Locus ID:** 2832

**UniProt ID:** [P48146](#)

**Cytogenetics:** 20q13.33

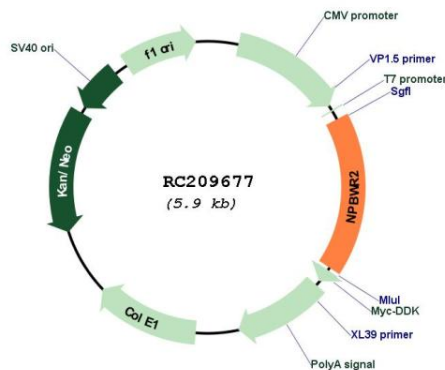
**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

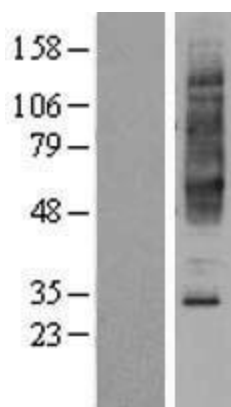
**MW:** 36.9 kDa

**Gene Summary:** The protein encoded by this gene is an integral membrane protein and G protein-coupled receptor. The encoded protein is similar in sequence to another G protein-coupled receptor (GPR7), and it is structurally similar to opioid and somatostatin receptors. This protein binds neuropeptides B and W. This gene is intronless and is expressed primarily in the frontal cortex of the brain. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC209677



Western blot validation of overexpression lysate (Cat# [LY401628]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209677 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).