

## Product datasheet for **RR204882**

### Aqp2 (NM\_012909) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Aqp2 (NM\_012909) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Aqp2  
**Synonyms:** AQP-2; aquaporin-2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR204882 representing NM\_012909  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGTGGGAACTCAGATCCATAGCCTTCTCCGAGCAGTGTGGCTGAGTTCTTGGCCACGCTCCTTTTTG  
TCTTCTTTGGCCTTGGCTCAGCCCTCCAGTGGCCAGCTCCCCACCTCTGTGCTCCAGATCGCCGTGGC  
CTTTGGTCTGGGCATCGGCATCCTGGTTCAGGCTCTGGCCATGTCAGCGGGGCACACATCAACCCGCC  
GTGACTGTGGCATGCCTGGTGGTTGCCATGTCTCCTTCCCTCGAGCTGCCTTCTATGTGGCTGCCAGC  
TGCTGGGCGCCGTGGCTGGGGCTGCCATCCTCCATGAGATTACTCCAGTAGAAATCCGTGGGGACCTGGC  
TGTCAATGCTCTCCACAACAACGCCACAGCTGGCCAGGCTGTGACTGTAGAGCTCTTCTGACCATGCAG  
CTGGTGTGTGCATCTTTGCCTCCACCGACGAGCGCCGCGGTGACAACCTGGGTAGCCCTGCCCTCTCCA  
TTGGTTTCTCTGTTACCCTGGGCCACCTCCTGGGATCTATTTACCGGTTGCTCCATGAATCCAGCCC  
CTCCCTGGCTCCAGCAGTTGTCACTGGCAAGTTTGTGATCACTGGGTCTTCTGGATCGGACCCCTGGT  
GGCGCCATCATCGGCTCCCTCCTCTACAACCTACCTGCTGTTCCCTCGGCAAAGAGCCTGCAGGAGCGT  
TGGCAGTGCTCAAGGGCCTGGAGCCCGACACCGACTGGGAGGAACGTGAAGTGCGGCGCCGCGAGTCGGT  
GGAGCTCCACTCTCTCAGAGCCTGCCTCGCGGACGCAAGGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR204882 representing NM\_012909  
 Red=Cloning site Green=Tags(s)

MWELRSIAFSRAVLAEFLLFVFFGLGSALQWASSPPSVLQIAVAFGLGIGILVQALGHVSGAHINPA  
 VTVAQLVGCHVSFLRAAFYVAAQLLGAAGAAILHEITPVEIRGDLAVNALHNNATAGQAVTVLFLTMQ  
 LVLCIFASTDERRGDLGSPALSIGFSVTLGHLGIYFTGCSMNPARS LAPAVVTGKFDHWFVWIGPLV  
 GAIIGSLLYNYLLFPSAKSLQERLAVLKGLEPDTDWEEREVRRRQSVLHSPQSLPRGSKA

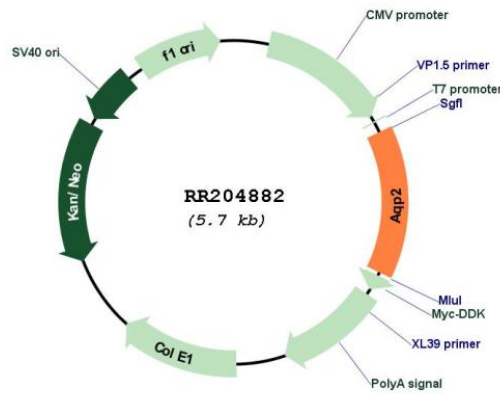
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_012909  
**ORF Size:** 813 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_012909.2</a> , <a href="#">NP_037041.2</a>
<b>RefSeq Size:</b>	1393 bp
<b>RefSeq ORF:</b>	816 bp
<b>Locus ID:</b>	25386
<b>UniProt ID:</b>	<a href="#">P34080</a>
<b>Cytogenetics:</b>	7q36
<b>MW:</b>	28.9 kDa
<b>Gene Summary:</b>	water channel protein involved in water reabsorption and vasopressin regulation in kidney collecting duct cells; mutation is linked to nephrogenic diabetes insipidous (NDI) [RGD, Feb 2006]