

## Product datasheet for **RN200436**

### Aqp4 (NM\_001142366) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Aqp4 (NM\_001142366) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Aqp4  
**Synonyms:** AQP-4; Miwc; WCH4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >RN200436 representing NM\_001142366  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGTGGCTTTCAAAGCGTCTGGACTCAAGCCTTCTGGAAGGCGGTCACAGCAGAGTTCCTGGCCATGC  
TCATCTTTGTTCTGCTCAGCGTGGGATCCACCATTAACGGGGTGGCTCAGAGAACCCCTACCTGTGGA  
CATGGTCTCATCTCCCTCTGCTTTGGACTCAGCATTGCCACCATGGTTCAGTCTTCGGCCACATCAGC  
GGTGGCCACATCAACCCAGCGGTGACAGTGGCCATGGTGTGCACACGAAAGATCAGCATCGCCAAGTCCG  
TCTTCTACATCACTGCGCAGTGCCTGGGGCCATCATCGGAGCTGGGATCCTCTACCTGGTACACCCCT  
CAGCGTGGTGGGAGGATTGGGAGTCAACCGGTTTCATGGAACCTCACTGCTGGCCATGGGCTCCTGGTG  
GAGCTAATAATCACTTTCCAGCTGGTATTCACCATTTTTGCCAGCTGTGATTCCAAACGGACTGATGTTA  
CTGGTTCGGTTGCTTTAGCAATTGGGTTTTCCGTTGCAATTGGACATTTGTTTGAATCAATTATACCGG  
AGCCAGCATGAATCCAGCTCGATCCTTTGGCCCTGCAGTTATCATGGGAAACTGGGAAAACCACTGGATA  
TATTGGTTGGACCAATCATAGGCGCTGTGCTGGCAGGTGCATTTACGAGTATGTCTTCTGCTCAGC  
TGGAGCTCAAACGTCGCCTAAAGGAAGCCTTCAAGCAAGCTGCACAGCAGACGAAAGGGAGCTACATGGA  
GGTGGAGGACAACCGGAGCCAAGTGGAGACAGAAGACTTGATCCTGAAGCCCGGGTGGTGCATGTGATC  
GACATTGACCGTGGAGACGAGAAGAAGGGAAGGACTCGTCTGGAGAGGTATTATCTTCTGTATGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1739\\_a04.zip](https://cdn.origene.com/chromatograms/ja1739_a04.zip)  
**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_001142366



[View online »](#)

<b>Insert Size:</b>	906 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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>	<u><a href="#">NM_001142366.1</a></u> , <u><a href="#">NP_001135838.1</a></u>
<b>RefSeq Size:</b>	5018 bp
<b>RefSeq ORF:</b>	906 bp
<b>Locus ID:</b>	25293
<b>UniProt ID:</b>	<u><a href="#">P47863</a></u>
<b>Cytogenetics:</b>	18p13
<b>Gene Summary:</b>	<p>This gene encodes a member of the aquaporin family of intrinsic membrane proteins that function as water-selective channels in the plasma membranes of many cells. This protein is the predominant aquaporin found in brain and has an important role in brain water homeostasis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. A recent study provided evidence for translational readthrough in this gene and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon. [provided by RefSeq, Dec 2015]</p> <p>Transcript Variant: This variant (2, also known as AQP4c) contains an alternate 5' terminal exon, which causes translation initiation from an in-frame, downstream start codon, compared to variant 1. The resulting isoform (M23) has a shorter N-terminus compared to isoform M1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>