

## Product datasheet for RR200435

### Aqp4 (NM\_012825) Rat Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
Product Name: Aqp4 (NM\_012825) Rat Tagged ORF Clone  
Tag: Myc-DDK  
Symbol: Aqp4  
Synonyms: AQP-4; Miwc; WCH4  
Mammalian Cell Selection: Neomycin  
Vector: pCMV6-Entry (PS100001)  
E. coli Selection: Kanamycin (25 ug/mL)  
Restriction Sites: SgfI-MluI  
Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

ACCN: NM\_012825  
ORF Size: 969 bp



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_012825.4](#), [NP\\_036957.1](#)

**RefSeq Size:** 5010 bp

**RefSeq ORF:** 972 bp

**Locus ID:** 25293

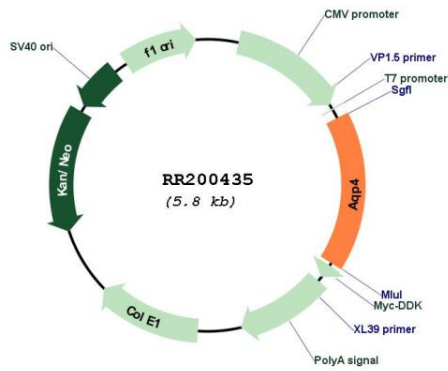
**UniProt ID:** [P47863](#)

**Cytogenetics:** 18p13

**MW:** 34.5 kDa

**Gene Summary:** 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]

Product images:



Circular map for RR200435