

Product datasheet for **MC208141**

Aqp4 (NM_009700) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aqp4 (NM_009700) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Aqp4
Synonyms:	aqua; WCH4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208141 representing NM_009700 Red =Cloning site Blue =ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGACAGAGCTGCGCAAGGCGGTGGGTAAGTGTGGACATTCCTGCAGTAGAGAGCATCATGG
TGGCTTTCAAAGGAGTCTGGACTCAGGCTTTCTGGAAGGCAGTCTCAGCAGAATTTCTGGCCACGCTTAT
CTTTGTTTTGCTCGGTGTGGATCCACCATAAACTGGGGTGGCTCAGAAAACCCCTTACCTGTGGACATG
GTCCTCATCTCCCTTTGCTTTGGACTCAGCATTGCTACCATGGTGCAGTGCTTTGGCCACATCAGTGGT
GCCACATCAATCCCGCTGTGACTGTAGCCATGGTGTGCACACGAAAGATCAGCATCGCTAAGTCCGTCTT
CTACATCATTGCACAGTGCCTGGGGCCATCATTGGAGCCGGCATCCTCTACCTGGTACACCTCCCAGT
GTGGTTGGAGGATTGGGAGTCAACACGGTTCATGGAAACCTCACCGCTGGCCATGGGCTCCTGGTGGAGT
TAATAACTACTTTCCAGTTGGTGTTCACATTTTTGCCAGCTGTGATTCCAAACGAACTGATGTTACTGG
TTCAATAGCTTTAGCAATTGGATTTTCCGTTGCAATTGGACATTTGTTTGAATCAATTATACTGGAGCC
AGCATGAATCCAGCTCGATCTTTTGGACCCGAGTTATCATGGGAACTGGGCAAACCACTGGATATATT
GGGTTGGACCAATCATGGGCGTGTGCTGGCAGGTGCCCTTTATGAGTATGTCTTCTGTCTGATGTGGA
GCTCAAACGTGCTTAAGGAAGCCTTCAGCAAAGCCGCGCAGCAGACAAAAGGGAGCTACATGGAGGTG
GAGGACAACCGGAGCCAAGTGGAGACGGAAGACTTGATCCTGAAGCCGGAGTGGTGCATGTGATTGACA
TTGACCGTGGAGAAGAGAAGAAGGGGAAAGACTTTCGGGAGAGGTATTGTCTCCGTATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1656_f11.zip

Restriction Sites: SgfI-MluI



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ACCN:	NM_009700
Insert Size:	972 bp
OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_009700.2 , NP_033830.2
RefSeq Size:	5082 bp
RefSeq ORF:	972 bp
Locus ID:	11829
UniProt ID:	P55088
Cytogenetics:	18 8.74 cM

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]

Transcript Variant: This variant (1, also known as AQP4.M1 or mMIWC2) represents the predominant transcript and encodes two isoforms, which result from the use of alternative in-frame translation termination codons. The shorter isoform (M1) results from translation termination at the upstream UGA stop codon, while the longer isoform (M1x) results from UGA stop codon readthrough to the downstream UAA termination codon. This RefSeq represents the shorter isoform (M1).