

Product datasheet for MR224809

Aqp2 (NM_009699) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aqp2 (NM_009699) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aqp2
Synonyms:	AQP-CD; cph; jpk; WCH-CD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224809 representing NM_009699 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGGAACCCGGTCCATAGCGTTCTCCGAGCGGTGCTGGCCGAGTTCCTGGCCACGCTCCTTTTCG
TCTTCTTTGGCCTTGGCTCAGCCCTCCAGTGGCCAGCTCCCCACCCTCTGTGCTCCAGATTGCCGTGGC
CTTTGGTCTGGCATTGGCACCCCTGGTTCAGGCTCTGGGCCATGTCAGCGGGGCCACATCAACCCTGCT
GTGACTGTGGCGTGCCTGGTGGTTGCCATGTCTCCTTCCTTCGAGCTGCCTTCTACGTGGCTGCCCAGC
TGCTGGGGCCGTGGCCGGGGCCGCATCTCCATGAGATTACCCCTGTAGAAATCCGCGGGGACCTGGC
TGCAATGCTCTCCACAACAATGCAACAGCCGGCCAGGCGGTGACTGTGGAGCTTCTCTGACCATGCAG
CTGGTGTGTGCATCTTTGCCTCCACCGATGAGCGCCGCAAGTGAACCTGGGTAGCCCTGCTCTCTCCA
TTGGTTTCTCTGTTACCCTGGGCCACCTCCTTGGGATCTATTTACCCGGCTGCTCCATGAATCCAGCCCG
TTCCCTGGCTCCAGCAGTTGTCAGTGGCAAGTTTATGATCACTGGGTCTTCTGGATCGGACCCCTGGT
GGCGCCATCATCGGTTCCCTCCTCTACAACCTGCTGTTCCCTCGACCAAGAGCCTGCAGGAGCGCC
TGGCGGTGCTCAAGGGCTGGAGCCGGACACTGACTGGGAGGAACGCGAAGTGGCGGGCGGCAGTCGGT
GGAGCTGCACTCTCCGCAGAGCCTGCCGCGGGCAGCAAGGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR224809 representing NM_009699
Red=Cloning site Green=Tags(s)

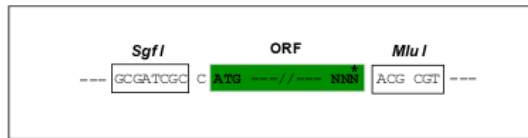
MWELRSIAFSRAVLAEFLATLLFVFFGLGSALQWASSPPSVLQIAVAFGLGIGTLVQALGHVSGAHINPA
 VTVAQLVGCHVSFLRAAFYVAAQLLGAVAGAAILHEITPVEIRGLAVNALHNNATAGQAVTVLFLTMQ
 LVLCIFASTDERRSDNLGSPALSIGFSVTLGHLLGIYFTGCSMNPARSLAPAVVTGKFDDHWVFWIGPLV
 GAIIGSLLYNYLLFPSTKSLQERLAVLKGLEPDTDWEEREVRRRQSVELHSPQSLPRGSKA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_009699

ORF Size: 813 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_009699.2](#)

RefSeq Size: 1416 bp

RefSeq ORF: 816 bp

Locus ID: 11827

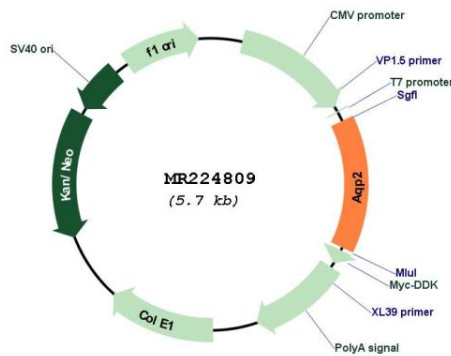
UniProt ID: [P56402](#)

Cytogenetics: 15 56.13 cM

MW: 29.4 kDa

Gene Summary: Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient (PubMed:10191086). Plays an essential role in renal water homeostasis (PubMed:16641094).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224809