

Product datasheet for **MG224809**

Aqp2 (NM_009699) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aqp2 (NM_009699) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aqp2
Synonyms:	AQP-CD; cph; jpk; WCH-CD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224809 representing NM_009699 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGGAACCCGGTCCATAGCGTTCTCCGAGCGGTGCTGGCCGAGTTCCTGGCCACGCTCCTTTTCG
TCTTCTTTGGCCTTGGCTCAGCCCTCCAGTGGCCAGCTCCCCACCCTCTGTGCTCCAGATTGCCGTGGC
CTTTGGTCTGGGCATTGGCACCCCTGGTTCAGGCTCTGGGCCATGTCAGCGGGGCCACATCAACCCTGCT
GTGACTGTGGCGTGCCTGGTGGTTGCCATGTCTCCTTCCTTCGAGCTGCCTTCTACGTGGCTGCCCAGC
TGCTGGGGCCGTGGCCGGGGCCGCATCCTCCATGAGATTACCCTGTAGAAATCCGCGGGGACCTGGC
TGTC AATGCTCTCCACAACAATGCAACAGCCGGCCAGGCGGTGACTGTGGAGCTCTTCTGACCATGCAG
CTGGTGTGTGCATCTTTGCCTCCACCGATGAGCGCCGAGTGACAACCTGGGTAGCCCTGCTCTCTCCA
TTGGTTTCTCTGTTACCCTGGGCCACCTCCTTGGGATCTATTTACCCGGCTGCTCCATGAATCCAGCCCG
TTCCCTGGCTCCAGCAGTTGTCACCTGGCAAGTTTATGATCACTGGGTCTTCTGGATCGGACCCCTGGT
GGCGCCATCATCGGTTCCCTCCTCTACAACCTACCTGCTGTTCCCTCGACCAAGAGCCTGCAGGAGCGCC
TGGCGGTGCTCAAGGCCTGGAGCCGACACTGACTGGGAGGAACGCGAAGTGGCGCGCCGAGTCGGT
GGAGCTGCACTCTCCGCAGAGCCTGCCGCGCGGCAAGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >MG224809 representing NM_009699
 Red=Cloning site Green=Tags(s)

MWELRSIAFSRAVLAEFLATLLFVFFGLGSALQWASSPPSVLQIAVAFGLGIGTLVQALGHVSGAHINPA
 VTVACLVGCHVSFLRAAFYVAAQLLGAVAGAAILHEITPVEIRGLAVNALHNNATAGQAVTVFLTMQ
 LVLCIFASTDERRSDNLGSPALSIGFSVTLGHLLGIYFTGCSMNPAPAVVTGKFDDHWVFWIGPLV
 GAIIGSLLYNYLLFPSTKSLQERLAVLKGLEPDTDWEEREVRRRQSVELHSPQSLPRGSKA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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

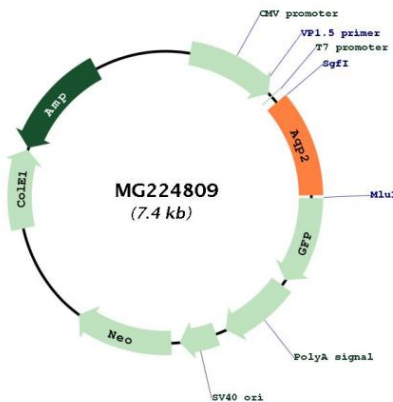
Locus ID: 11827

UniProt ID: [P56402](#)

Cytogenetics: 15 56.13 cM

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 MG224809