

Product datasheet for **MR226214**

Aqp5 (NM_009701) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aqp5 (NM_009701) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aqp5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226214 representing NM_009701 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGAAGGAGGTGTGTTCAAGGCGTGTTCGAGAGTTCTGGCCACCCTCATCT
TCGTCTTCTTTGGCCTGGGCTCGGCACTCAAGTGGCCCTCGGCGCTGCCACCATTCTGCAGATCTCCAT
AGCCTTTGGCCTGGCCATAGGTACCTTGCCCAAGCCCTGGGACCTGTGAGTGGTGGCCACATCAATCCG
GCCATTACTCTGGCCCTTTAATAGGCAACCAGATCTCTCTGCTCCGAGCCATCTTACGTGGCAGCCC
AGCTGGTGGGTGCCATTGCTGGAGCAGGCATCCTGTACTGGTGGCGCCAGGCAATGCCCGGGTAACT
GGCCGTCAATGCGCTCAGCAACAACACAACACCAGGCAAGGCCGTGGTGGTGGAGTTAATCTTGACTTTC
CAGCTGGCCCTCTGCATCTTCTCCTCCACGGACTCCCAGCCAGCCAGCCGGTGGGCTCCCCAGCCTTAT
CCATTGGCTTGTGCGTCACTGGGCCATCTTGTGGGATCTACTTCACCGGCTGTTCCATGAACCCAGC
CCGATCTTTGGCCCTGCGGTGGTCAATCGGTTAGCCCTCTCACTGGGCTTCTGGGTAGGACCG
ATCGTGGGGCCGCTCTGGCTGCAATCCTACTTCTACTTGTCTTCCCTCCTCGCTGAGCCTCCAGC
ACCGTGTGGCTGGTCAAAGGCACATATAGCCAGAGGAGGACTGGGAAGATCATAGAGAGGAGCGGAA
GAAGACCATCGAGCTGACGGCACAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR226214 representing NM_009701
 Red=Cloning site Green=Tags(s)

MKKEVCSVAFFKAVFAEFLATLIFVFFGLGSALKWPSALPTILQISIAFGLAIGTLAQLGPVSGGHINP
 AITLALLIGNQISLLRAIFYVAAQLVGAIAAGILYWLAPGNARGNLAVNALSNNTTPGKAVVVELILTF
 QLALCIFSSSTDSRRTSPVGPALSIGLSVTLGHLVGIYFTGCSMNPARSFGPAVVMNRFSPSHWVFWVGP
 IVGAVLAAILYFYLLFPSSLSLHDRVAVVKGTYEPEEDWEDHREERKKTIELTAH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9024_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009701

ORF Size: 795 bp

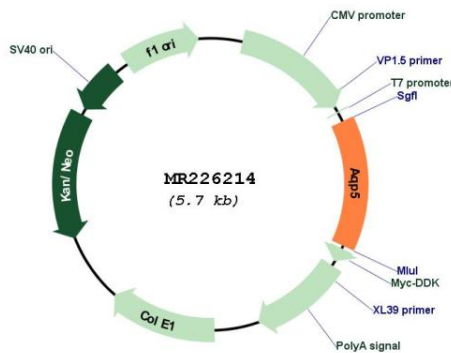
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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 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_009701.4](#), [NP_033831.1](#)
- RefSeq Size:** 1551 bp
- RefSeq ORF:** 798 bp
- Locus ID:** 11830
- UniProt ID:** [Q9WTY4](#)
- Cytogenetics:** 15 56.13 cM
- MW:** 28.7 kDa
- Gene Summary:** Forms a water-specific channel (By similarity). Plays an important role in fluid secretion in salivary glands (PubMed:10400615, PubMed:16571723, PubMed:18027168). Required for TRPV4 activation by hypotonicity. Together with TRPV4, controls regulatory volume decrease in salivary epithelial cells (PubMed:16571723). Seems to play a redundant role in water transport in the eye, lung and in sweat glands (PubMed:10619865, PubMed:12042359, PubMed:18027168).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226214