

## Product datasheet for **MG226214**

### Aqp5 (NM\_009701) Mouse Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
Product Name: Aqp5 (NM\_009701) Mouse Tagged ORF Clone  
Tag: TurboGFP  
Symbol: Aqp5  
Mammalian Cell Selection: Neomycin  
Vector: pCMV6-AC-GFP (PS100010)  
E. coli Selection: Ampicillin (100 ug/mL)  
ORF Nucleotide Sequence: >MG226214 representing NM\_009701  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGAAGGAGGTGTGTTCAAGGCGTGTTCGCAGAGTTCCTGGCCACCCTCATCT  
TCGTCTTCTTTGGCCTGGGCTCGGCACTCAAGTGGCCCTCGGCGCTGCCACCATTCTGCAGATCTCCAT  
AGCCTTTGGCCTGGCCATAGGTACCTTGCCCAAGCCCTGGGACCTGTGAGTGGTGGCCACATCAATCCG  
GCCATTACTCTGGCCCTTAAATAGGCAACAGATCTCTCTGCTCCGAGCCATCTTCTACGTGGCAGCCC  
AGCTGGTGGTGCCATTGCTGGAGCAGGCATCCTGTACTGGTGGCGCCAGGCAATGCCCGGGTAACT  
GGCCGTCAATGCGCTCAGCAACAACACAACACCAGGCAAGGCCGTGGTGGTGGAGTAACTTTGACTTTT  
CAGCTGGCCCTCTGCATCTTCTCCTCCACGGACTCCCGCCGACCCAGCCGGTGGGCTCCCCAGCCTTAT  
CCATTGGCTTGTGCGTCACTGGCCATCTTGTGGGATCTACTTCACCGGCTGTTCCATGAACCCAGC  
CCGATCTTTGGCCCTGCGGTGGTCAATCGGTTAGCCCTCTCACTGGGCTTCTGGGTAGGACCG  
ATCGTGGGGCCGCTCTGGCTGCAATCCTACTTCTACTTGTCTTTCCCTCCTCGCTGAGCCTCCAGC  
ACCGTGTGGCTGGTCAAAGGCACATATAGCCAGAGGAGGACTGGGAAGATCATAGAGAGGAGCGGAA  
GAAGACCATCGAGCTGACGGCACAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG226214 representing NM\_009701  
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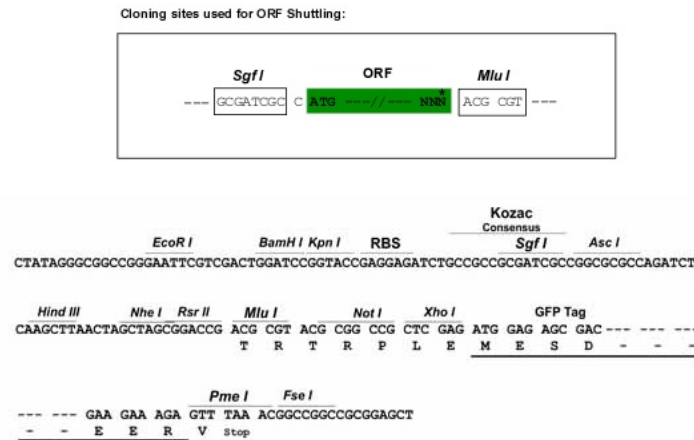
MKKEVCSVAFFKAVFAEFLATLIFVFFGLGSALKWPSALPTILQISIAFGLAIGTLAQLGPVSGGHINP  
 AITLALLIGNQISLLRAIFYVAAQLVGAIAAGILYWLAPGNARGNLAVNALSNNTTPGKAVVVELILTF  
 QLALCIFSSSTDSRRTSPVGPALSIGLSVTLGHLVGIYFTGCSMNPARSFGPAVVMNRFSPSHWVFWVGP  
 IVGAVLAAILYFYLLFPSSLSLHDRVAVVKGTYEPEEDWEDHREERKKTIELTAH

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3029\\_f08.zip](https://cdn.origene.com/chromatograms/ja3029_f08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_009701

**ORF Size:** 795 bp

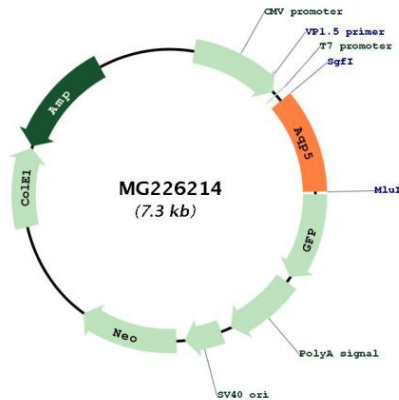
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](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\\_009701.4](#), [NP\\_033831.1](#)
- RefSeq Size:** 1551 bp
- RefSeq ORF:** 798 bp
- Locus ID:** 11830
- UniProt ID:** [Q9WTY4](#)
- Cytogenetics:** 15 56.13 cM
- 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 MG226214