

Product datasheet for **RC206069**

Aquaporin 5 (AQP5) (NM_001651) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aquaporin 5 (AQP5) (NM_001651) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aquaporin 5
Synonyms:	AQP-5; PPKB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206069 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGAAGGAGGTGTGCTCCGTGGCCTTCCTCAAGGCCGTGTTTCGAGAGTTCTTGCCACCCTCATCT
TCGTCTTCTTTGGCCTGGGCTCGGCCCTCAAGTGGCCGTCGGCGCTGCCTACCATCCTGCAGATCGCGCT
GGCGTTTGGCCTGGCCATAGGCACGCTGGCCAGGCCCTGGGACCCGTGAGCGGGCCACATCAACCC
GCCATCACCTGGCCCTTTGGTGGCAACCAGATCTCGCTGCTCCGGGCTTTCTTCTACGTGGCGGCC
AGCTGGTGGCGCCATTGCCGGGCTGGCATCCTCTACGGTGTGGCACCGCTCAATGCCCGGGCAATCT
GGCGTCAACGCGCTCAACAACAACAACGCAGGGCCAGGCCATGGTGGTGGAGCTGATTCTGACCTTC
CAGCTGGCACTCTGCATCTTCGCCTCCACTGACTCCCGCCGCACCAAGCCCTGTGGGCTCCCCAGCCCTGT
CCATTGGCCTGTCTGTACCCCTGGGCCACCTTGTGCGAATCTACTTCACTGGCTGCTCCATGAACCCAGC
CCGCTCTTTTGGCCCTGCGGTGGTCAATGAATCGGTTACGCCCCGCTCACTGGGTTTTCTGGGTAGGGCC
ATCGTGGGGCGGTCTGGCTGCCATCCTTTACTTCTACTGCTCTTCCCAACTCCCTGAGCCTGAGTG
AGCGTGTGGCCATCATCAAAGGCACGTATGAGCCTGACGAGGACTGGGAGGAGCAGCGGGAAGAGCGGAA
GAAGACCATGGAGCTGACCACCCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC206069 protein sequence
 Red=Cloning site Green=Tags(s)

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MKKEVCSVAF LKAVFAEFLATLIFVFFGLG SALKWPSALPTILQIALAFGLAIGTLA QALGPVSGGHINP
AITLALLVGNQISLLRAFFYVAAQLVGA IAGAGILYGVAPLNARGNLAVNALNNNTTQGGQAMVVELILTF
QLALCIFASTDSRRTSPVGPALSIGLSVTLGHLVGIYFTGCSMNPARSFGPAVVMNRFSPAHWVFWVGP
IVGAVLAAILYFYLLFPNSLSLSE RVAIIKGTYPDEDWEEQREERKKT MELTTR
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TRTRP LEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6192_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001651

ORF Size: 795 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_001651.4](#)

RefSeq Size: 1840 bp

RefSeq ORF: 798 bp

Locus ID: 362

UniProt ID: [P55064](#)

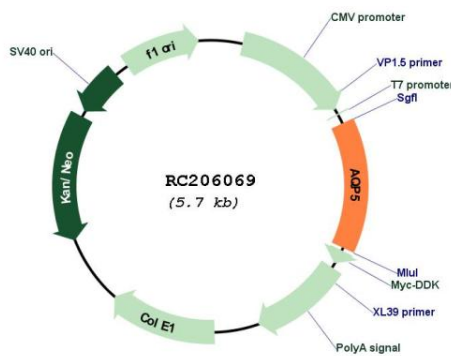
Cytogenetics: 12q13.12

Protein Families: Druggable Genome, Transmembrane

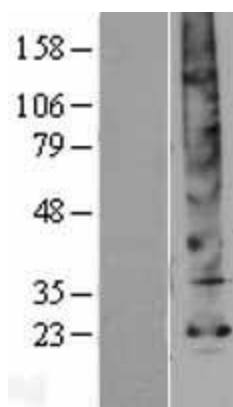
MW: 28.3 kDa

Gene Summary: Aquaporin 5 (AQP5) is a water channel protein. Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein (MIP or AQP0). Aquaporin 5 plays a role in the generation of saliva, tears and pulmonary secretions. AQP0, AQP2, AQP5, and AQP6 are closely related and all map to 12q13. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC206069



Western blot validation of overexpression lysate (Cat# [LY400622]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206069 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).