

## Product datasheet for RC201856

### Aquaporin 3 (AQP3) (NM\_004925) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aquaporin 3 (AQP3) (NM_004925) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aquaporin 3
Synonyms:	AQP-3; GIL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201856 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGTCGACAGAAGGAGCTGGTGTCCCGCTGCGGGGAGATGCTCCACATCCGCTACCGGCTGCTCCGAC  
AGGCGCTGGCCGAGTGCCTGGGGACCCTCATCCTGGTGTGTTGGCTGTGGCTCCGTGGCCAGGTTGT  
GCTCAGCCGGGGACCCACGGTGGTTTCCTCACCATCAACCTGGCCTTTGGCTTTGCTGCACTCTGGC  
ATCCTCATCGCTGGCCAGGTCTCTGGGGCCACCTGAACCCTGCCGTGACCTTTGCCATGTGCTTCTGG  
CTCGTGAGCCCTGGATCAAGCTGCCATCTACACCCTGGCACAGACGCTGGGAGCCTTCTGGGTGCTGG  
AATAGTTTTTGGGCTGTATTATGATGCAATCTGGCACTTCGCCGACAACCAGCTTTTTGTTTCGGGCCCC  
AATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGCACTTGGATATGATCAATGGCTTCTTTGACC  
AGTTTATAGGCACAGCCTCCCTTATCGTGTGTGTGCTGGCCATTGTTGACCCCTACAACAACCCCGTCCC  
CCGAGGCCCTGGAGGCCTTACCCTGGGCCCTGGTGGTCTGGTCAATGGCACCTCCATGGGCTTCAACTCC  
GGCTATGCCGTCAACCCTGCCGGGACTTTGGCCCCGCCTTTTACAGCCCTTGGGGCTGGGGCTCTG  
CAGTCTTACGACCGGCCAGCATTGGTGGTGGGTGCCATCGTGTCCCCACTCTGGGCTCCATTGCGGG  
TGCTTTCGTGTACCAGCTGATGATCGGCTGCCACCTGGAGCAGCCCCACCCTCCAACGAGGAAGAGAAT  
GTGAAGCTGGCCCATGTGAAGCAACAAGGAGCAGATC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC201856 protein sequence  
Red=Cloning site Green=Tags(s)

MGRQKELVSRCGEMLHIRYRLLRQALAECLGTLILVMFGCGSVAQVVL SRGTHGGFLTINLAFGFAVTLG  
 ILIAGQVSGAHLNPAVTFAMCFLAREPWIKLPIYTLAQTLAGFLGAGIVFGLYYDAIWHFADNQLFVSGP  
 NGTAGIFATYPSGHLDMINGFFDQFIGTASLIVCVLAI VDPYNNPVPRGLEAFTVGLVVLVIGTSMGFNS  
 GYAVNPARDFGPRLFTALAGWGS AVFTTGQHWVPIVSPLLGSIAGVFVYQLMIGCHLEQPPPSNEEEN  
 VKLAHVKHKEQI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6193\\_b12.zip](https://cdn.origene.com/chromatograms/mk6193_b12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004925

**ORF Size:** 876 bp

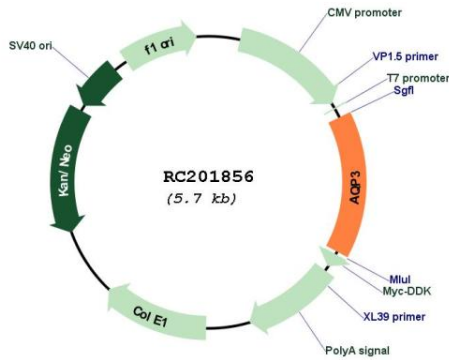
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

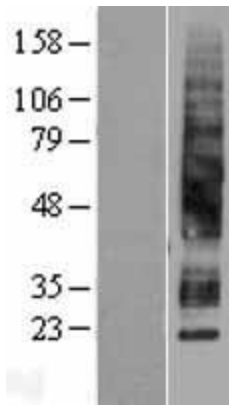
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_004925.5</a>
<b>RefSeq Size:</b>	1882 bp
<b>RefSeq ORF:</b>	879 bp
<b>Locus ID:</b>	360
<b>UniProt ID:</b>	<a href="#">Q92482</a>
<b>Cytogenetics:</b>	9p13.3
<b>Domains:</b>	MIP
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>MW:</b>	31.5 kDa
<b>Gene Summary:</b>	<p>This gene encodes the water channel protein aquaporin 3. Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein, also known as aquaporin 0. Aquaporin 3 is localized at the basal lateral membranes of collecting duct cells in the kidney. In addition to its water channel function, aquaporin 3 has been found to facilitate the transport of nonionic small solutes such as urea and glycerol, but to a smaller degree. It has been suggested that water channels can be functionally heterogeneous and possess water and solute permeation mechanisms. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015]</p>

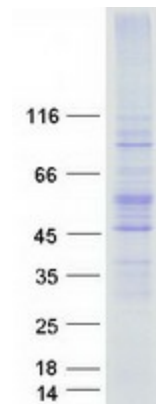
Product images:



Circular map for RC201856



Western blot validation of overexpression lysate (Cat# [LY401543]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201856 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AQP3 protein (Cat# [TP301856]). The protein was produced from HEK293T cells transfected with AQP3 cDNA clone (Cat# RC201856) using MegaTran 2.0 (Cat# [TT210002]).