

Product datasheet for **MR204243**

Aqp7 (NM_007473) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Aqp7 (NM_007473) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Aqp7
Synonyms: AQP7L; AQPap
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR204243 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCCAGGTCTGTGCTGGAGACCATAACAATCAGTGCTACAGAAGAATATGGTGCGAGAGTTTCTGG
CAGAGTTCCTGAGTACCTATGTCATGATGGTGTGGCCTTGGTCCGTGGCTCACATGGTTTTAGGAGA
AAACTCTGGCAGCTATCTCGGTGTCAACTTGGGTTTTGGATTCCGAGTGACCATGGGAGTCCATGTAGCA
GGCGGCATCTCTGGGGCCACATGAATGCCGCAGTGACTTCCACCAATTGTGCACTAGGCCGAATGACCT
GGAAGAAGTCCCTGTATATGTGCTGGGTCACTTCTGGGCTCCTCTCAGCTGCAGCTACCACCTACTT
AATTTTCTATGGTGCCATTAACCACTTTGCAGGCGGAGACCTGTTGGTGACAGGTTCCAAGGCCACTGCA
AACATTTTTGCCACCTATCTTCCCTGAATACATGACACTGTGGCGGGCTTCTGGATGAGGCATTCGTGA
CTGGGATGCTGCAGCTGTGTCTCTTCGCCATCACCGACAAGAAGAAGCAGTCCAGCACTTCAAGGGACCGA
GCCCCCTCGTGATAGGCATCCTTGTACCCTGCTGGGGTGTGCTAGGCATGAACTCCGGATATGCAATC
AACCCATCCCCTGACCTGCCTCCCCGGTGTCACTTTCACTTTCATTGCTGGCTGGGGCAACAAGTGTTCAGAG
CCGAAACAACCTGGTGGTGGGTGCCGGTGGTGGCACCCTTCTGGGCGCCTACCTAGGTGGTATTGTATA
CCTGGGTTTAATTCACCCAGCATACCACAGGATCCTCAGAGACTGGAGAATTTTACAGCAAGAGACCAG
AAGGTAAGTGCATCATAAAGAATGCAGCTTCTGCAAACATAAGTGGCTCTGTGCCTCTAGAGCACTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR204243 protein sequence
Red=Cloning site Green=Tags(s)

MAPRSVLETIQSVLQKNMVREFLAEFLSTYVMMVFGLGSVAHMLGENSGSYLGVNLGFGFGVTMGVHVA
 GGISGAHMNAAVFTNCALGRMTWKKFPVYVLGQFLGSFSAATTYLIFYGAINHFAGGDLVLTGSKATA
 NIFATYLPYMTLWRGFLDEAFVTGMLQLCLFAITDKKNSPALQGTEPLVIGILVTVLGVSLGMNSGYAI
 NPSRDLPPRLFTFIAGWGKQVFRAGNNWWVPVAPLLGAYLGGIVYVGLIHPSIQDPQRLNFARDQ
 KVTASYKNAASANISGSVPLEHF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_007473

ORF Size: 912 bp

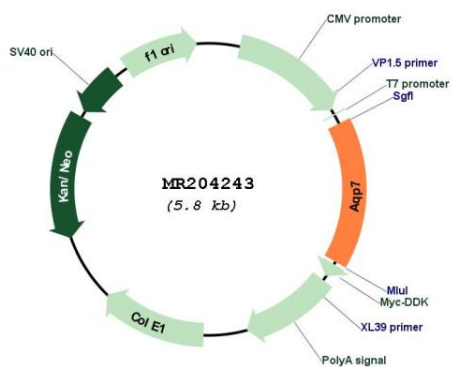
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	<ol style="list-style-type: none">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:	<u>NM_007473.4</u>
RefSeq Size:	2524 bp
RefSeq ORF:	912 bp
Locus ID:	11832
UniProt ID:	<u>O54794</u>
Cytogenetics:	4 A5
MW:	32.7 kDa
Gene Summary:	Forms a channel that mediates water and glycerol transport across cell membranes at neutral pH (PubMed:15591341, PubMed:15746100, PubMed:16009937). The channel is also permeable to urea (By similarity). Plays an important role in body energy homeostasis under conditions that promote lipid catabolism, giving rise to glycerol and free fatty acids (PubMed:15591341, PubMed:16009937). Mediates glycerol export from adipocytes (PubMed:15591341, PubMed:15746100, PubMed:16009937). After release into the blood stream, glycerol is used for gluconeogenesis in the liver to maintain normal blood glucose levels and prevent fasting hypoglycemia (PubMed:15591341). Required for normal glycerol reabsorption in the kidney (PubMed:15998844, PubMed:17077387).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204243