

Product datasheet for **MG203989**

Aqp3 (NM_016689) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aqp3 (NM_016689) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aqp3
Synonyms:	AQP-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG203989 representing NM_016689 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTCGACAGAAGGAGTTGATGAATCGTTGTGGGGAGATGCTTCACATCCGCTACCGGCTGCTTCGCC
AGGCGCTGGCGGAGTGCCTGGGACCCTCATCCTTGTGATGTTTGGCTGTGGCTCCGTGGCTCAGGTGGT
GCTCAGCCGTGGCACCCATGGTGGCTTCCTCACCATCAACTTGGCTTTTGGCTTCGCTGTCACCCTTGGC
ATCTTGGTGGCTGGCCAGGTGTCTGGTGCCACTTGAACCCCGCTGTGACCTTCGCAATGTGCTTCTGG
CAGGAGGCCCTGGATCAAGCTGCCATCTATGCACTGGCACAGACACTGGGGCCTTCTTGGGCGCTGG
GATTGTTTTTGGGCTGTACTACGATGCAATCTGGGCCTTTGCCAACAATGAGCTTTTCGCTCTGGCCCC
AACGGCACAGCTGGAATCTTTGCCACCTATCCCTCTGGACACTTGGACATGGTCAATGGCTTCTTTGATC
AGTTTCATAGGCACAGCCGCCCTTATTGTGTGTGTACTGGCCATCGTTGACCCCTATAACAACCCTGTGCC
CCGTGGCTGGAGGCTTTCAGTGTGGGCTGGTGGTCTGGTCAATGGAACCTCCATGGGCTTCAATTCT
GGCTATGCCGTCAACCCTGCCCGTGACTTTGGACCTCGCTCTTCACCGCCCTGGCTGGCTGGGGCTCAG
AAGTCTCAGACTGGCCGGCACTGGTGGTGGGATCCCATTTGTCTCCCCACTCTGGGTTCCATCGCTGG
TGCTTTCGTGTACCAGCTCATGATTGGTTGCCACCTGGAGCAGCCCCACCCTCCACCGAGGAAGAGAAT
GTGAAGCTGGCCACATGAAACACAAGGAGCAGATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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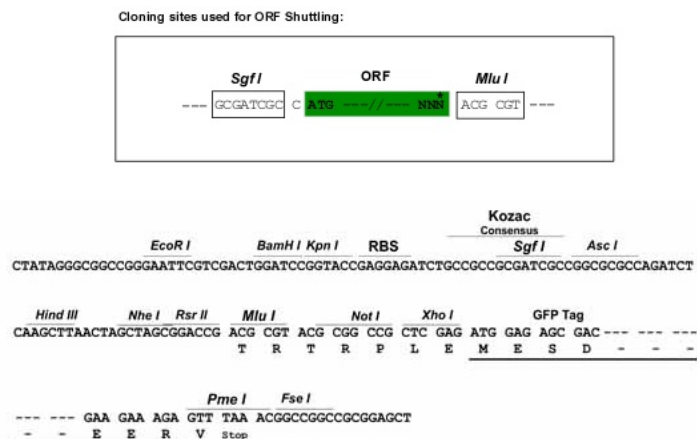
Protein Sequence: >MG203989 representing NM_016689
 Red=Cloning site Green=Tags(s)

MGRQKELMNRCGEMLHIRYRLLRQALAECLGTLILVMFGCGSVAQVVL SRGTHGGFLTINLAFGFAVTLG
 ILVAGQVSGAHLNPAVTFAMCFLAREPWIKLPIYALAQTLGAFLGAGIVFGLYYDAIWAFANNELFVSGP
 NGTAGIFATYPSGHLDMVNGFFDQFIGTAALIVCVLAI VDPYNNPVPRGLEAFTVGLVVLVIGTSMGFNS
 GYAVNPARDFGPRLFTALAGWGSEVFTTGRHWWVPIVSPLLGSIAGVFVYQLMIGCHLEQPPPSTEEEN
 VKLAHMKHKEQI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016689

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).

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_016689.2](#), [NP_057898.2](#)

RefSeq Size: 1763 bp

RefSeq ORF: 879 bp

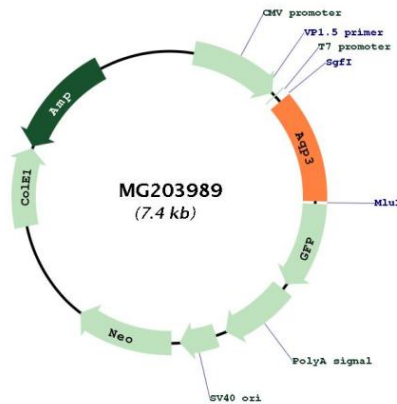
Locus ID: 11828

UniProt ID: [Q8R2N1](#)

Cytogenetics: 4 A5

Gene Summary: Water channel required to promote glycerol permeability and water transport across cell membranes. Acts as a glycerol transporter in skin and plays an important role in regulating SC (stratum corneum) and epidermal glycerol content. Involved in skin hydration, wound healing, and tumorigenesis. Provides kidney medullary collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient. Slightly permeable to urea and may function as a water and urea exit mechanism in antidiuresis in collecting duct cells. It may play an important role in gastrointestinal tract water transport and in glycerol metabolism.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG203989