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Product datasheet for RG212363

Aquaporin 7 (AQP7) (NM_001170) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aquaporin 7 (AQP7) (NM_001170) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aquaporin 7
Synonyms:	AQP7L; AQPap; GLYCQTL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG212363 representing NM_001170
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTTCAAGCATCCGGGCACAGGCGGTCCACCCGTGGCTCCAAAATGGTCTCCTGGTCCGTGATAGCAA
AGATCCAGGAAATACTGCAGAGGAAGATGGTGCGAGAGTTCCTGGCCGAGTTCATGAGCACATATGTCAT
GATGGTATTCGGCCTTGGTTCCGTGGCCCATATGGTTCTAAATAAAAAATATGGGAGCTACCTTGGTGTC
AACTTGGGTTTTGGCTTCGGAGTCACCATGGGAGTGCACGTGGCAGGCCGCATCTCTGGAGCCCACATGA
ACGCAGCTGTGACCTTTGCTAACTGTGCGCTGGGCCGCGTGCCCTGGAGGAAGTTTCCGGTCTATGTGCT
GGGGCAGTTCCTGGGCTCCTTCCTGGCGGCTGCCACCATCTACAGTCTCTTCTACACGGCCATTCTCCAC
TTTTCGGGTGGACAGCTGATGGTGACCGGTCCCGTCGCTACAGCTGGCATTTTTGCCACCTACCTTCCTG
ATCACATGACATTGTGGCGGGGCTTCCTGAATGAGGCGTGGCTGACCGGGATGCTCCAGCTGTGTCTCTT
CGCCATCACGGACCAGGAGAACAACCCAGCACTGCCAGGAACAGAGGCGCTGGTGATAGGCATCCTCGTG
GTCATCATCGGGGTGTCCCTTGGCATGAACACAGGATATGCCATCAACCCGTCCCGGGACCTGCCCCCCC
GCATCTTCACCTTCATTGCTGGTTGGGGCAAACAGGTCTTCAGCAATGGGGAGAACTGGTGGTGGGTGCC
AGTGGTGGCACCACTTCTGGGTGCCTATCTAGGTGGCATCATCTACCTGGTCTTCATTGGCTCCACCATC
CCACGGGAGCCCCTGAAATTGGAGGATTCTGTGGCGTATGAAGACCACGGGATAACCGTATTGCCCAAGA
TGGGATCTCATGAACCCACGATCTCTCCCCTCACCCCCGTCTCTGTGAGCCCTGCCAACAGATCTTCAGT
CCACCCTGCCCCACCCTTACATGAATCCATGGCCCTAGAGCACTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

>RG212363 representing NM_001170
Red=Cloning site Green=Tags(s)

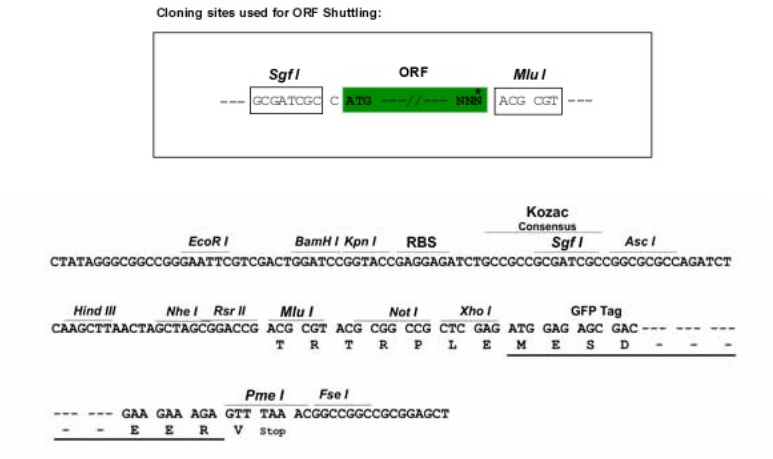
MVQASGHRRSTRGSKMVSWSVIAKIQEILQRKMVREFLAEFMSTYVMMVFGLGSVAHMVLNKKYGSYLGV
NLGFGFGVTMGVHVAGRISGAHMNAAVTFANCALGRVPWRKFPVYVLGQFLGSFLAAATIYSLFYTAILH
FSGGQLMVTGPVATAGIFATYLPDHMTLWRGFLNEAWLTGMLQLCLFAITDQENNPALPGTEALVIGILV
VIIGVSLGMNTGYAINPSRDLPPRIFTFIAGWGKQVFSNGENWWWVPVVAPLLGAYLGGIIYLVFIGSTI
PREPLKLEDSVAYEDHGITVLPKMGSHEPTISPLTPVSVSPANRSSVHPAPPLHESMALEHF

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1833_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001170

ORF Size: 1026 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

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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_001170.3
RefSeq Size:	1258 bp
RefSeq ORF:	1029 bp
Locus ID:	364
UniProt ID:	O14520
Cytogenetics:	9p13.3
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	PPAR signaling pathway
Gene Summary:	This gene encodes a member of the aquaporin family of water-selective membrane channels. The encoded protein localizes to the plasma membrane and allows movement of water, glycerol and urea across cell membranes. This gene is highly expressed in the adipose tissue where the encoded protein facilitates efflux of glycerol. In the proximal straight tubules of kidney, the encoded protein is localized to the apical membrane and prevents excretion of glycerol into urine. The encoded protein is present in spermatids, as well as in the testicular and epididymal spermatozoa suggesting an important role in late spermatogenesis. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. This gene is located adjacent to a related aquaporin gene on chromosome 9. Multiple pseudogenes of this gene have been identified. [provided by RefSeq, Dec 2015]

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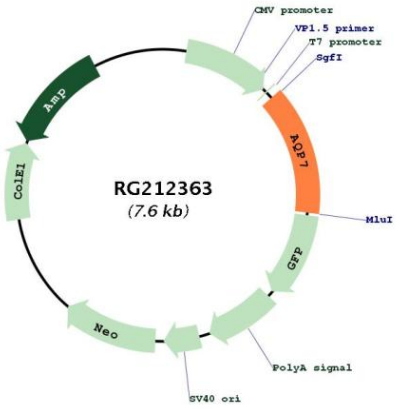
Product images:



Circular map for RG212363

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