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Product datasheet for RG216810

Aquaporin 0 (MIP) (NM_012064) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aquaporin 0 (MIP) (NM_012064) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MIP
Synonyms:	AQP0; CTRCT15; LIM1; MIP26; MP26
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG216810 representing NM_012064
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGGAACTGCGATCAGCCTCCTTTTGGAGGGCCATATTCGCTGAGTTCTTTGCCACCCTCTTCTATG
TCTTCTTTGGGCTGGGGTCCTCACTGCGCTGGGCTCCTGGACCCCTGCATGTTCTGCAGGTGGCTATGGC
ATTTGGCTTGGCCCTGGCTACACTGGTGCAGTCTGTGGGCCACATCAGTGGAGCCCACGTCAATCCTGCA
GTCACTTTTGCTTTCCTTGTGGGCTCCCAGATGTCCCTGCTCCGTGCCTTCTGCTATATGGCAGCCCAGC
TCCTGGGAGCTGTGGCTGGGGCCGCTGTGCTGTATAGCGTTACCCCACCTGCTGTCCGAGGAAACCTAGC
ACTCAACACGTTGCACCCTGCGGTGAGCGTGGGCCAGGCAACCACAGTGGAGATCTTCCTGACGCTCCAG
TTCGTGCTCTGCATCTTTGCCACATACGACGAGAGGCGGAATGGCCAACTGGGCTCCGTGGCCCTGGCCG
TTGGCTTCTCCCTTGCCCTGGGGCACCTCTTTGGGATGTATTATACTGGTGCAGGCATGAATCCTGCCCG
CTCCTTTGCTCCTGCCATTCTCACTGGGAACTTCACTAACCACTGGGTGTACTGGGTAGGCCCAATCATT
GGAGGGGGTCTGGGCAGCCTCCTGTACGACTTTCTTCTCTTCCCCCGGCTCAAGAGTATTTCTGAGAGAC
TGTCTGTCCTCAAGGGTGCCAAACCCGATGTCTCCAATGGACAACCAGAGGTCACAGGGGAACCTGTTGA
ACTGAACACCCAGGCCCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

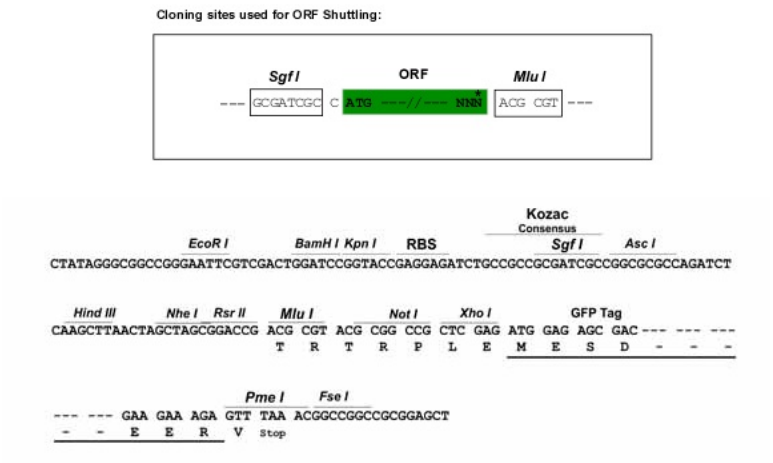
>RG216810 representing NM_012064
Red=Cloning site Green=Tags(s)

MWELRSASFWRAIFAEFFATLFYVFFGLGSSLRWAPGPLHVLQVAMAFGLALATLVQSVGHISGAHVNPA
VTFAFLVGSQMSLLRAFCYMAAQLLGAVAGAAVLYSVTPPAVRGNLALNTLHPAVSVGQATTVEIFLTLQ
FVLCIFATYDERRNGQLGSVALAVGFSLALGHLFGMYYTGAGMNPARSFAPAILTGNFTNHWVYWVGPII
GGGLGSLLYDFLLFPRLKSISERLSVLKGAKPDVSNGQPEVTGEPVELNTQAL

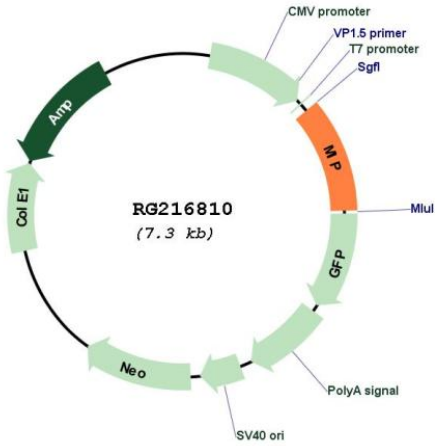
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_012064

ORF Size: 789 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_012064.4
RefSeq Size:	2004 bp
RefSeq ORF:	792 bp
Locus ID:	4284
UniProt ID:	P30301
Cytogenetics:	12q13.3
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	Major intrinsic protein is a member of the water-transporting aquaporins as well as the original member of the MIP family of channel proteins. The function of the fiber cell membrane protein encoded by this gene is undetermined, yet this protein is speculated to play a role in intracellular communication. The MIP protein is expressed in the ocular lens and is required for correct lens function. This gene has been mapped among aquaporins AQP2, AQP5, and AQP6, in a potential gene cluster at 12q13. [provided by RefSeq, Jul 2008]