

Product datasheet for MR229456

Arntl2 (NM_001289681) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arntl2 (NM_001289681) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Arntl2
Synonyms: 4632430A05Rik; bHLHe6; BMAL2; CLIF; MOP9
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR229456 representing NM_001289681
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAAGAGCTGTACCGTCCCTGTCAAAGAAGAGCAGCCATGCTCGTCCTGCTCAAAGAAGAAAGACCATA
GAAAATTCACACCGTCCATTGCACTGGATACTTGAGAAGCTGGCCTCTGAATGTTGTTGGCATGGAGAA
AGAGTCGGGTGGTGGGAAGGACAGCGGTCTCTTACCTGCCTTGTGGCTATGGGACGGTTGCATCCATAC
ATTGTCCCTCAAAGAGTGGCAAGATCAACGTGAGACCGGCTGAGTTCATAACTCGTTCGCAATGAACG
GGAAATTCGTCTATGTTGACCAAAGGGCAACGGCAATTTTAGGATACCTGCCTCAGGAACTTTTGGGAAC
TTCATGTTATGAATTTTTATCAGGATGACCACAGTAGTTTACTGACAAGCACAAAGCAGTTCTGCAG
AGTAAGGAGAAAACTTACAGACTCATACAAATTCAGAGTGAAGGATGGTGCCTTCGTGACTCTGAAGA
GTGAGTGGTTCAGCTTACAAACCCTTGGACCAAAGAGCTGGAGTACATTGTGTCTGTCAACACATTGGT
TTTGGGGCGCAGTGAGACCAGGCTGTCTTTGCTTCATTGCGGGCAGCAGCCAGTCTCCGAAGACTCA
TTAGACAATCCTGCATCAATGTGCCGGTGTATCCACGGGACCGTCTTGGTGTCTGGGAGTATTGGAA
CAGATATTGCAAATGAGTTCTGAGTTTACAGAGATTACACTTTCATCCCAGAAGATGCAAGCCCTTC
AGAAGAAGTGAGAGATGACTGCAGTGAAATGGTGGGAATGCCTATGGCCTGCATCCACTAGGGAGCCT
TTTGACGTGAGCCCTTCTGAAACAGAGGTCTGGAGGCTGCCAGGCAACACCAGAGCACTGAACCCGCC
ACCCTCACGGACCACTTCCCGGTGACAGTGCCAGCTGGGTTTTGATGTCTGTGTGACAGTGACAGCAT
AGACATGGCTGCATTCATGAATTACCTCGAAGCAGAGGGGGCCTGGGTGACCCTGGGACTTCAGTGAC
ATCCAGTGGGCACTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229456 representing NM_001289681
 Red=Cloning site Green=Tags(s)

MKSCTVPVKEEQPCSSCSKDDHRKFHTVHCTGYLRSWPLNVVGMKEESGGGKDSGPLTCLVAMGRLLHPY
 IVPQKSGKINVRPAEFITRFAMNGKFVYVDQRATAILGYLPQELLGTSCYEYFHQDDHSSLTDKHKAVLQ
 SKEKILTDSYKFRVKDGFVTLKSEWFSFTNPWTKLELYIVSVNTLVLRSETRLSLLHCGGSSQSSEDS
 FRQSCINVPGVSTGTVLGAGSIGTDIANEVL SLQRLHSSSPEDASPSEEVRDDCSVNGGNAYGPASTREP
 FAVSPSETEVLEAARHQSTEPAHPHGPLPGDSAQLGFDVLCSDSIDMAAFMNYLEAEGGLGDPGDFSD
 IQWAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

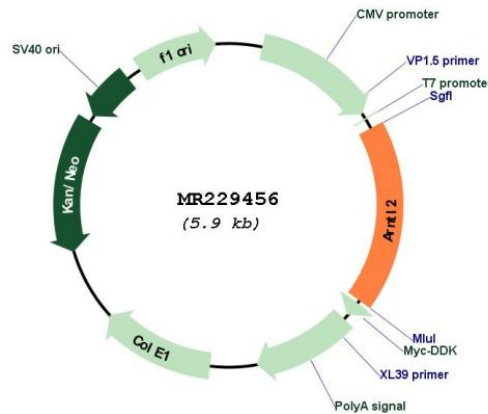
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289681

ORF Size:	1065 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:	<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:	NM_001289681.1 , NP_001276610.1
RefSeq Size:	2547 bp
RefSeq ORF:	1068 bp
Locus ID:	272322
UniProt ID:	Q2VPD4
Cytogenetics:	6 G3
MW:	39.2 kDa
Gene Summary:	This gene encodes a basic helix-loop-helix transcription factor belonging to the PAS (Per, Arnt, Sim) superfamily. The PAS proteins play important roles in adaptation to low atmospheric and cellular oxygen levels, exposure to certain environmental pollutants, and diurnal oscillations in light and temperature. This protein forms a transcriptionally active heterodimer with the circadian Clock protein, the structurally related Mop4, and hypoxia-inducible factors, such as Hif1alpha. Consistent with its role as a biologically relevant partner of circadian and hypoxia factors, this protein is coexpressed in regions of the brain such as the thalamus, hypothalamus, and amygdala. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Feb 2014]