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Product datasheet for RN216928

Arntl2 (NM_133391) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arntl2 (NM_133391) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Arntl2
Synonyms:	Arnt4; Bmal2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

Fully Sequenced ORF:

>RN216928 representing NM_133391
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGTTTCCAAGGAAACGTAGAAGAAGTGATTCAGAGCTGCTCCAGTCAGAATTCAGGACAGATGCAA
TGGTGGAAAACCTTCCCCGGAGTCCCTTTACCTCTGTTCTTTCAACAAGAACAGGAGTAGCAGTGCCCAA
TGGCATCAGGGAAGCTCACAGCCAGACAGAAAAGCGTCGGAGAGACAAGATGAACCATCTGATTTGGAAA
CTGTCATCTATGATCCCTCCACACATCCCCACAGCCCACAAACTGGACAAACTGAGCATCCTGAGGAGGG
CAGTGCAGTACTTGAGGTCTCAGAGAGGCATGACAGAGTTTTATTTAGGAGAAAATGCTAAACCTTCATT
TATTCAGGATAAGGAACTCAGCCACTTAATCCTCAAGGCAGCAGAAGGCTTCCTACTTGTGGTTGGATGT
GAAGGAGGGAGAATTCTTTTCGTTTCTAAGTCTGTCTCCAAAACGCTGCATTATGATCAGGCTAGTTTGA
TGGGACAGAACTTGTTTGACTTCTTACACCCAAAAGATGTCCCCAAAGTAAAGGAACAACTTTCTTGTGA
TGGTTTACTAAGAGTGAAAGTTCACAGTCACTCCCATATTGGGCGATCACGCGTGCATTCTGGCTCCAGA
CGATCTTTCTTCTTTAGAATGAAGAGCAGCTGTACAGTCCCCGTCAAAGAAGAGCAACGATGCTCGTCCT
GTTCAAAGAAGAAAGACCAGAGAAAATTCCACACCATCCATTGCACTGGATACTTGAGAAGCTGGCCACC
GAATGTTGTGGGCACGGAGAAAGAGATGGGCAGTGGGAAAGACAGTGGTCCTCTTACCTGCCTTGTGGCT
ATGGGACGGTTACAGCCATATACTGTCCCCCCGAAGAATGGCAAGATCAACGTGAGACCGGCTGAGTTCA
TAACCCGATTCGCAATGAACGGGAAATTCGTCTACGTCGACCAAAGGGCAACAGCAATTTTAGGATACCT
GCCTGATGAACTTTTGGGAACTTCGTGTTATGAATATTTTCATCAGGATGACCACAGTAATTTGAGTGAC
AAGCACAAAGCAGTTCTGCAGAGTAAGGAGAAAATACTTACAGATTCATACAAATTCAGAGTGAAGGATG
GCTCCTTTGTGACTCTGAAGAGCAAGTGGTTCAGCTTCACTAACCCTTGGACCAAAAAGCTGGAGTACAT
CGTGTCTGTCAACACGCTGGTTTTGGGGCGCAGTGAGACCGCAGTATCCGTGCCTCAGTGCCGCAGCAGC
CAGTCCTCTGAAGACTCATTTAGACAACCCTGCGTCAGTGTGCCGGGCATATCCACAGGGACCTTACTTG
GCGCTGGGAGTATTGGAACAGATATTGCAAATGAGGTTCTGAGTTTACAGAGGTCACACTCTTCATCCCC
AGAAGACGCAAACCCTTCAGGAGTAGTGAGAGATAAGCACAGTGTAAACTTCGGGAGCGCCCCTGTGCCC
GTGTCCACTGGGGAGCTCTTTGCACTGAGTCCTGAAACAGAGGGCCTGGAGGCTGCCAGGCAACACCAGA
GTGCTGAGCCCGCCCACTGTCACAAACCACTCCTCAGTGACAGTACCCAGTTGGGTTTTGATGCCCTGTG
TGACAGCGACGACACAGCCATGGCTACATTCATGAATTACCCCGAAGCAGAGGGTGGCCTGGGTGACCCT
GGGGACTTCAGTGACATCCAGTGGACACTCTAG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-RsrII

ACCN: NM_133391

Insert Size: 1713 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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_133391.1, NP_596882.1
RefSeq Size:	1928 bp
RefSeq ORF:	1713 bp
Locus ID:	362464
Cytogenetics:	4q44
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. [provided by RefSeq, Feb 2014]