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Product datasheet for SC314284

ARNTL2 (NM_020183) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARNTL2 (NM_020183) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARNTL2
Synonyms:	bHLHe6; BMAL2; CLIF; MOP9; PASD9
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_020183, the custom clone sequence may differ by one or more nucleotides

ATGGCGGCGGAAGAGGAGGCTGCGGCGGGAGGTAAAGTGTTGAGAGAGGAGAACCAGTGCATTGCTCCTG
TGGTTTCCAGCCGCGTGAGTCCAGGGACAAGACCAACAGCTATGGGGTCTTTCAGCTCACACATGACAGA
GTTTCCACGAAAACGCAAAGGAAGTGATTCAGACCCATCCCAGTCAGGAATCATGACAGAAAAAGTGGTG
GAAAAGCTTTCTCAGAATCCCCTTACCTATCTTCTTTCAACAAGGATAGAAATATCAGCCTCCAGTGGCA
GCAGAGTGGAAGATGGTGAACACCAAGTTAAAATGAAGGCCTTCAGAGAAGCTCATAGCCAAACTGAAAA
GCGGAGGAGAGATAAAATGAATAACCTGATTGAAGAACTGTCTGCAATGATCCCTCAGTGCAACCCCATG
GCGCGTAAACTGGACAAACTTACAGTTTTAAGAATGGCTGTTCAACACTTGAGATCTTTAAAAGGCTTGA
CAAATTCTTATGTGGGAAGTAATTATAGACCATCATTTCTTCAGGATAATGAGCTCAGACATTTAATCCT
TAAGACTGCAGAAGGCTTCTTATTTGTGGTTGGATGTGAAAGAGGAAAAATTCTCTTCGTTTCTAAGTCA
GTCTCCAAAATACTTAATTATGATCAGGCTAGTTTGACTGGACAAAGCTTATTTGACTTCTTACATCCAA
AAGATGTTGCCAAAGTAAAGGAACAACTTTCTTCTTTTGATATTTCACCAAGAGAAAAGCTAATAGATGC
CAAAACTGGTTTGCAAGTTCACAGTAATCTCCACGCTGGAAGGACACGTGTGTATTCTGGCTCAAGACGA
TCTTTTTTCTGTCGGATAAAGAGTTGTAAAATCTCTGTCAAAGAAGAGCATGGATGCTTACCCAACTCAA
AGAAGAAAGAGCACAGAAAATTCTATACTATCCATTGCACTGGTTACTTGAGAAGCTGGCCTCCAAATAT
TGTTGGAATGGAAGAAGAAAGGAACAGTAAGAAAGACAACAGTAATTTTACCTGCCTTGTGGCCATTGGA
AGATTACAGCCATATATTGTTCCACAGAACAGTGGAGAGATTAATGTGAAACCAACTGAATTTATAACCC
GGTTTGCAGTGAATGGAAAATTTGTCTATGTAGATCAAAGGGCAACAGCGATTTTAGGATATCTGCCTCA
GGAACTTTTGGGAACTTCTTGTTATGAATATTTTCATCAAGATGACCACAATAATTTGACTGACAAGCAC
AAAGCAGTTCTACAGAGTAAGGAGAAAATACTTACAGATTCCTACAAATTCAGAGCAAAAGATGGCTCTT
TTGTAACTTTAAAAAGCCAATGGTTTAGTTTCACAAATCCTTGGACAAAAGAACTGGAATATATTGTATC
TGTCAACACTTTAGTTTTGGGACATAGTGAGCCTGGAGAAGCATCATTTTTACCTTGTAGCTCTCAATCA
TCAGAAGAATCCTCTAGACAGTCCTGTATGAGTGTACCTGGAATGTCTACTGGAACAGTACTTGGTGCTG
GTAGTATTGGAACAGATATTGCAAATGAAATTCTGGATTTACAGAGGTTACAGTCTTCTTCATACCTTGA
TGATTCGAGTCCAACAGGTTTAATGAAAGATACTCATACTGTAAACTGCAGGAGTATGTCAAATAAGGAG
TTGTTTCCACCAAGTCCTTCTGAAATGGGGGAGCTAGAGGCTACCAGGCAAAACCAGAGTACTGTTGCTG
TCCACAGCCATGAGCCACTCCTCAGTGATGGTGCACAGTTGGATTTCGATGCCCTATGTGACAATGATGA
CACAGCCATGGCTGCATTTATGAATTACTTAGAAGCAGAGGGGGGCCTGGGAGACCCTGGGGACTTCAGT
GACATCCAGTGGACCCTCTAG

Restriction Sites: Please inquire

ACCN: NM_020183

Insert Size: 1900 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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_020183.3, NP_064568.3
RefSeq Size:	1930 bp
RefSeq ORF:	1911 bp
Locus ID:	56938
UniProt ID:	Q8WYA1
Cytogenetics:	12p11.23
Domains:	PAS, HLH
Protein Families:	Druggable Genome, Transcription Factors
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, Oct 2011] Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.