

Product datasheet for RC216969L2

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OriGene Technologies, Inc.

ARNTL2 (NM_020183) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ARNTL2 (NM_020183) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: ARNTL2

Synonyms: bHLHe6; BMAL2; CLIF; MOP9; PASD9

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

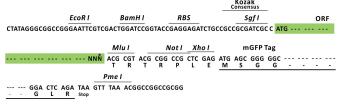
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC216969).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_020183

ORF Size: 1908 bp





ARNTL2 (NM_020183) Human Tagged Lenti ORF Clone - RC216969L2

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: <u>NM 020183.3</u>

 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

MW: 70.7 kDa

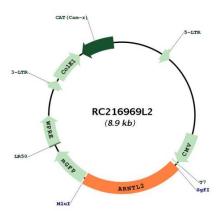
Gene Summary: This gene encodes a basic helix-loop-helix transcription factor belonging to the PAS (PER,

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, Oct 2011]



Product images:



Circular map for RC216969L2