

## **Product datasheet for MR224577L4**

## Arntl2 (NM\_172309) Mouse Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Arntl2 (NM\_172309) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Arntl2

Synonyms: 4632430A05Rik; bHLHe6; BMAL2; CLIF; MOP9

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(MR224577).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_172309

ORF Size: 1737 bp



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#### Arntl2 (NM\_172309) Mouse Tagged Lenti ORF Clone - MR224577L4

**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 172309.2</u>, <u>NP 758513.1</u>

RefSeq Size: 1740 bp
RefSeq ORF: 1740 bp
Locus ID: 272322
UniProt ID: Q2VPD4
Cytogenetics: 6 G3

**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

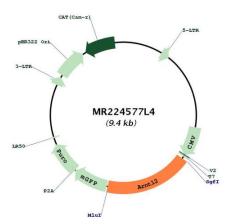
factors, this protein is coexpressed in regions of the brain such as the thalamus,

hypothalamus, and amygdala. Alternatively spliced transcript variants encoding different

isoforms have been described for this gene. [provided by RefSeq, Feb 2014]



# **Product images:**



Circular map for MR224577L4