

## Product datasheet for RC211966L3

### ARNT2 (NM\_014862) Human Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARNT2 (NM_014862) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	ARNT2
Synonyms:	bHLHe1; WEDAS
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC211966).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF.

ACCN:	NM_014862
ORF Size:	2151 bp



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<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_014862.3</a> , <a href="#">NP_055677.3</a>
<b>RefSeq Size:</b>	6576 bp
<b>RefSeq ORF:</b>	2154 bp
<b>Locus ID:</b>	9915
<b>UniProt ID:</b>	<a href="#">Q9HBZ2</a>
<b>Cytogenetics:</b>	15q25.1
<b>Domains:</b>	PAS, HLH, PAC
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Pathways in cancer, Renal cell carcinoma
<b>MW:</b>	78.5 kDa
<b>Gene Summary:</b>	This gene encodes a member of the basic-helix-loop-helix-Per-Arnt-Sim (bHLH-PAS) superfamily of transcription factors. The encoded protein acts as a partner for several sensor proteins of the bHLH-PAS family, forming heterodimers with the sensor proteins that bind regulatory DNA sequences in genes responsive to developmental and environmental stimuli. Under hypoxic conditions, the encoded protein complexes with hypoxia-inducible factor 1alpha in the nucleus and this complex binds to hypoxia-responsive elements in enhancers and promoters of oxygen-responsive genes. A highly similar protein in mouse forms functional complexes with both aryl hydrocarbon receptors and Single-minded proteins, suggesting additional roles for the encoded protein in the metabolism of xenobiotic compounds and the regulation of neurogenesis, respectively. [provided by RefSeq, Dec 2013]