

## Product datasheet for **TR306570**

### ARNTL2 Human shRNA Plasmid Kit (Locus ID 56938)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	ARNTL2 Human shRNA Plasmid Kit (Locus ID 56938)
Locus ID:	56938
Synonyms:	bHLHe6; BMAL2; CLIF; MOP9; PASD9
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ARNTL2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 56938). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u><a href="#">NM_001248002</a></u> , <u><a href="#">NM_001248003</a></u> , <u><a href="#">NM_001248004</a></u> , <u><a href="#">NM_001248005</a></u> , <u><a href="#">NM_020183</a></u> , <u><a href="#">NM_020183.1</a></u> , <u><a href="#">NM_020183.2</a></u> , <u><a href="#">NM_020183.3</a></u> , <u><a href="#">NM_020183.4</a></u> , <u><a href="#">NM_001248005.1</a></u> , <u><a href="#">NM_001248004.1</a></u> , <u><a href="#">NM_001248003.1</a></u> , <u><a href="#">NM_001248002.1</a></u> , <u><a href="#">BC000172</a></u> , <u><a href="#">BC125061</a></u> , <u><a href="#">BC125062</a></u> , <u><a href="#">NM_020183.5</a></u> , <u><a href="#">NM_001248003.2</a></u> , <u><a href="#">NM_001248005.2</a></u> , <u><a href="#">NM_001248004.2</a></u> , <u><a href="#">NM_001248002.2</a></u>
UniProt ID:	<u><a href="#">Q8WYA1</a></u>
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



[View online »](#)

**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).