OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TL500299

Noct Mouse shRNA Plasmid (Locus ID 12457)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Noct Mouse shRNA Plasmid (Locus ID 12457)
Locus ID:	12457
Synonyms:	AU043840; Ccr4; Ccrn4l
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Noct - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 12457). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	NM_009834, NM_009834.1, NM_009834.2, BC139369, BC026940, BC139370
UniProt ID:	O35710
Summary:	Represses translation and promotes degradation of target mRNA molecules (By similarity). Plays an important role in post-transcriptional regulation of metabolic genes under circadian control (PubMed:20685873, PubMed:20498072). May have low deadenylase activity and may degrade the poly(A) tails of specific target mRNAs, leading to their degradation and suppression of translation (PubMed:17400819). Exerts a rhythmic post-transcriptional control of genes necessary for metabolic functions including nutrient absorption, glucose/insulin sensitivity, lipid metabolism, adipogenesis, inflammation and osteogenesis (PubMed:20498072, PubMed:22082366, PubMed:21820310, PubMed:22073225, PubMed:22331129). Plays an important role in favoring adipogenesis over osteoblastogenesis and acts as a key regulator of the adipogenesis/osteogenesis balance (PubMed:20498072, PubMed:22082366). Promotes adipogenesis by activating PPARG transcriptional activity in a deadenylase-independent manner by facilitating its nuclear translocation (PubMed:20498072). Regulates circadian expression of NOS2 in the liver and negatively regulates the circadian expression of IGF1 in the bone (PubMed:22073225, PubMed:20685873). Critical for proper development of early embryos (PubMed:23449310). [UniProtKB/Swiss-Prot Function]

View online »

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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).