

Product datasheet for MC212867

Ciart (NM_001033302) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ciart (NM_001033302) Mouse Untagged Clone

Tag: Tag Free Symbol: Ciart

Synonyms: Chrono; Gm129

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC212867 representing NM_001033302

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGATTCTCCATCTAGTGTTTCTTCTTATTCCTCCTCCTCCTCTCCCCATCATTTTCCACGTCCTCTG CACTGTGGGTCAGAGAGGAGGTTCCAGGCCCAGTCCAGGCCCTATCCGCTGCAGACATCGACCCAGGGTT TCTAGTAACCAACATACAGCACCTCATCTGGAACAGCAAGGATCTGAAGTCAAGAGATCAAGAGACGGTG AACAGGAGACGAGTCTGAACACCCAAGGATGTACTACAGAGGGAGATCTGCTCTTTGCTCAAAAGTGTAA AGAACTCCAAGGGTTCATACGGCCCCTCACAGACCTACTGAACGGACTCAAGATGGGTCGCTTTGACAGA GGATTAAGTAGCTTCCAACAGAGTGTGGCCATGGACCGGATCCAGCGCATAGTGGGTGTTTTACAGAAGC CTCAGATGGGAGAACGTTATCTAGGAACCTTGCTGCAGGTGGAAGGGATGTTAAAGACTTGGTTTCCTCA GGTGACCCCGGGGCTGCTTCTCCTGCACCTCTCCTAGAGAAGATGGGCCAAACACAGCTGGGACATTTAG TTTTGAAACCAAAGCAGCCTTGGCATCTCACTGGATGGCCAGCTATGAACCTCACCTGGATTCATAGCAC TCCAATTTGTAACCCTCCCCTCAGCTCCCAAGGCTCCGCCTCTGGCCACAGCCCCATAGGCACTGGAGCC AGCATTGGTGTCATCCTTGTCCTCCAGAAAGGACGGCCCTTCACCCATTCTGCCCCGGGCACTCCGG TCCCACCAACTCCACTGTCTCCTGTCGTCCCTGGTGATCTGAAGAAACTGCCTGGCGAGGAGCCTCGTTG CCACAGTTTGCCAGTAACACTGCCATCAGACTGGAGTTGCATCCTATGTCCGCCTGTCCTGCCTACCACA GACAGAGAGATGACTAAAGGACACCCAGAGCCACAGATGACTAGCCATCCCCCAGTTGCTCCGGATCCTC AGCCCTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites: Sgfl-Mlul

ACCN: NM_001033302

Insert Size: 1128 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by

calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001033302.2</u>, <u>NP 001028474.1</u>

 RefSeq Size:
 1395 bp

 RefSeq ORF:
 1128 bp

 Locus ID:
 229599

 UniProt ID:
 Q3TQ03

 Cytogenetics:
 3 F2.1



Gene Summary:

Transcriptional repressor which forms a negative regulatory component of the circadian clock and acts independently of the circadian transcriptional repressors: CRY1, CRY2 and BHLHE41. In a histone deacetylase-dependent manner represses the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer. Abrogates the interaction of ARNTL/BMAL1 with the transcriptional coactivator CREBBP and can repress the histone acetyl-transferase activity of the CLOCK-ARNTL/BMAL1 heterodimer, reducing histone acetylation of its target genes. Rhythmically binds the E-box elements (5'-CACGTG-3') on circadian gene promoters and its occupancy shows circadian oscillation antiphasic to ARNTL/BMAL1. Interacts with the glucocorticoid receptor (NR3C1) and contributes to the repressive function in the glucocorticoid response.[UniProtKB/Swiss-Prot Function]