

## Product datasheet for RR203978L3

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# Crtc1 (NM\_001047115) Rat Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Crtc1 (NM\_001047115) Rat Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Crtc1

Synonyms: Mect1; TORC-1; TORC1

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RR203978).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_001047115

ORF Size: 1890 bp



### Crtc1 (NM\_001047115) Rat Tagged Lenti ORF Clone - RR203978L3

**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 001047115.1</u>, <u>NP 001040580.1</u>

 RefSeq Size:
 1893 bp

 RefSeq ORF:
 1893 bp

 Locus ID:
 684527

 UniProt ID:
 Q157S1

 Cytogenetics:
 16p14

**Gene Summary:** Transcriptional coactivator for CREB1 which activates transcription through both consensus

and variant cAMP response element (CRE) sites. Acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. Enhances the interaction of CREB1 with TAF4. Regulates the expression of specific CREB-activated genes such as the steroidogenic gene, StAR. Potent coactivator of PGC1alpha and inducer of mitochondrial biogenesis in muscle cells (By similarity). In the hippocampus, involved in late-phase long-term potentiation (L-LTP)

maintenance at the Schaffer collateral-CA1 synapses. May be required for dendritic growth of developing cortical neurons. In concert with SIK1, regulates the light-induced entrainment of the circadian clock. In response to light stimulus, coactivates the CREB-mediated transcription of PER1 which plays an important role in the photic entrainment of the circadian clock (By

similarity).[UniProtKB/Swiss-Prot Function]