

## Product datasheet for **RC206974**

### **TORC1 (CRTC1) (NM\_015321) Human Tagged ORF Clone**

#### **Product data:**

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                              |
| Product Name:             | TORC1 (CRTC1) (NM_015321) Human Tagged ORF Clone |
| Tag:                      | Myc-DDK  |
| Symbol:                   | TORC1  |
| Synonyms:                 | Mam-2; MAML2; MECT1; TORC-1; TORC1; WAMTP1       |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-Entry (PS100001)                           |
| E. coli Selection:        | Kanamycin (25 ug/mL)                             |



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RC206974 representing NM\_015321  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCGACTTCGAACAATCCGCGGAAATTCAGCGAGAAGATCGCGCTGCACAATCAGAAGCAGGCGGAGG  
 AGACGGCGGCTTCGAGGAGGTCATGAAGGACCTGAGCCTGACGCGGGCCGCGCGCTCCAGCTCCAGAA  
 ATCCCAGTACCTGCAACTGGGCCCCAGCCGAGGCCAGTACTATGGCGGGTCCCTGCCCAACGTGAACCGAG  
 ATCGGGAGTGGCACCATGGACCTGCCCTTCAGACCCCTTCCAATCCTCGGGCTGGACACCAGCCGGA  
 CCACCCGGCACCATGGGCTGGTGGACAGGGTGTACCGGGAGCGTGGCCGGCTCGGCTCCCCACACCCGCC  
 GCCCTGTCAGTGGACAAACACGGACGGCAGGCCGACAGCTGCCCTATGGCACCATGTACTCTCACCA  
 CCCCGGGACACCAGCTGGAGAAGGACCAATTCTGACTCCGCCCTGCACCAGACACAATGACGCCACCGC  
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 GCTCCCGACCCCGCTGGACCCCGAGGAGCCACCTTCCCTGCACTGAGCAGCTCCAGCAGCACCGGCAAC  
 CTCGCGGCCAACCTGACGCACCTGGGCATCGGTGGCGCCGCCAGGGAATGAGCACACCTGGCTCCTCTC  
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 CGCCCTGTCCCGCTGTCAACCATCACTCAGGCTGTAGCCATGGACGCCCTGTCTCTGGAGCAGCAGCTG  
 CCCTACGCCTTCTTCAACAGGGGGCTCCCAGCAGCCACCGCCGAGCCCGCCAGCCCGCCCGCTCCTC  
 CACCCCGTCCCAGCAGCCACCACCCCGCCACCCACAGGCGCCGTCCGCTGCCCTGGTGGGCC  
 CCTGTTGCCAGCGCCAGCCTGACTCGTGGGCCACAGCCCGCCCGCTTGCAGTACCGGTACCGTCCCTCT  
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 CTTCTCCCAGGGAGCTCCCGCAACACTTCCACCCTGGGAGCGTGTGGGGACGCGTACTATGAG  
 CAGCAGATGGCGGCCAGGACGGCAATGCTCTGTCCACCAGCTGGAGCAGTTCAACATGATGGAGAACG  
 CCATCAGCTCCAGCAGCCTGTACAGCCCGGCTCCCACTCACTACTCGCAGGCGGCCATGATGGGCT  
 CACGGGCAGCCACGGGAGCCTGCCGACTCGCAGCAACTGGGATACGCCAGCCACAGTGGCATCCCCAAC  
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 TCGGCGAGCTCAGCTTCCACTCCGACAGCCAGTTTCCCTGGACGAACTCAAGATCGACCCCTGACCT  
 CGACGGACTGCACATGCTCAACGACCCCGACATGGTTCTGGCCGACCCAGCCACCAGGACACCTCCGG  
 ATGGACCGCCTG

AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC206974 representing NM\_015321  
Red=Cloning site Green=Tags(s)

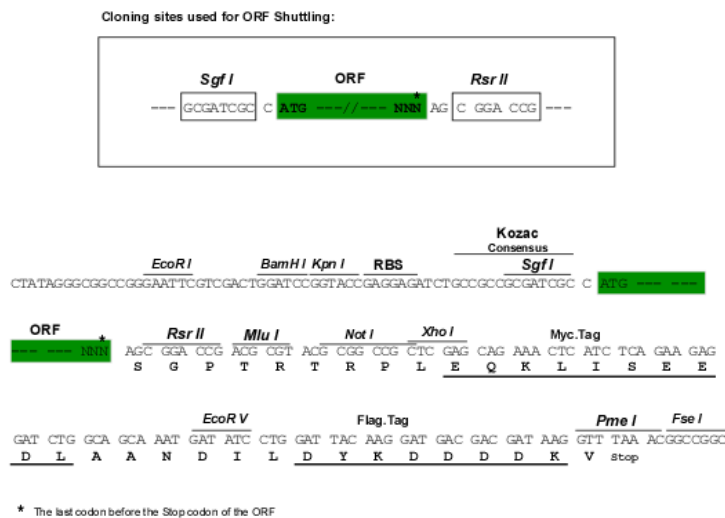
MATSNNPRKFSEKIALHNQKQAEETAAFEEVMKDSLTRAARLQLQKSQYLQLGPSRGQYYGGSLPNVNO  
 IGSMTDLPFQTPFQSSGLDTSRTTRHHGLVDRVYRERGRLGSPHRRPLSVDKHGRQADSCPYGTMYS  
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 PYAFFTQAGSQQPPPPQPPPPPPASQPPPPPPQAPVRLPPGGPLLPASL TRGPQPPPLAVTVPS  
 LPQSPENPGQPSMGIDIASAPALQQYRTSAGSPANQSPTSPVSNQGFSPGSSPQHTSTLGSVFGDAYYE  
 QQMAARQANALSHQLEQFNMMENAISSSSLYSPGSTLNYSQAAMMGLTSGHGLPDSQQLGYASHSGIPN  
 IILTGTGESPPSLSKELTSSLAGVDVSFSDSDSQFPLDELKIDPLTLDGLHMLNDPDMVLADPATETDFR  
 MDRL

SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4037\\_c06.zip](https://cdn.origene.com/chromatograms/mg4037_c06.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_015321

**ORF Size:** 1902 bp

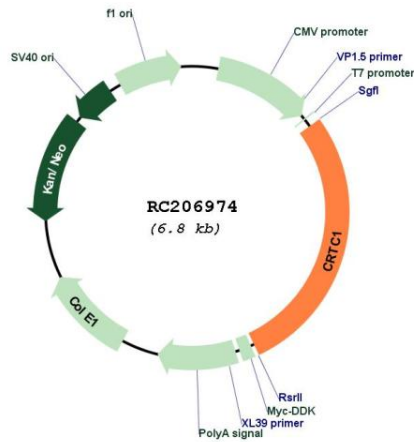
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

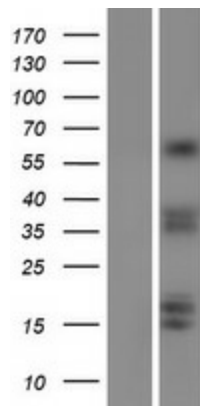
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

|                               |  |
|-------------------------------|--|
| <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_015321.1</a> , <a href="#">NP_056136.1</a>  |
| <b>RefSeq Size:</b>           | 2505 bp  |
| <b>RefSeq ORF:</b>            | 1905 bp  |
| <b>Locus ID:</b>              | 23373  |
| <b>UniProt ID:</b>            | <a href="#">Q6UUV9</a>   |
| <b>Cytogenetics:</b>          | 19p13.11   |
| <b>Protein Families:</b>      | Transcription Factors  |
| <b>MW:</b>                    | 67.1 kDa   |
| <b>Gene Summary:</b>          | <p>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. 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 (By similarity). 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.</p> <p>[UniProtKB/Swiss-Prot Function]</p> |

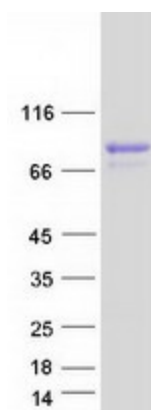
Product images:



Circular map for RC206974



Western blot validation of overexpression lysate (Cat# [LY414618]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206974 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CRTC1 protein (Cat# [TP306974]). The protein was produced from HEK293T cells transfected with CRTC1 cDNA clone (Cat# RC206974) using MegaTran 2.0 (Cat# [TT210002]).