

## Product datasheet for **RR210377**

### **Crtc2 (NM\_001033895) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Crtc2 (NM_001033895) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Crtc2
Synonyms:	RGD1308903; Torc2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RR210377 representing NM\_001033895  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCGACGT CAGGGCGAACGGCCGGTTCCGCCACAGCCTCGGCGTCCAATCCACGCAAGTTTAGTG  
 AAAAGATCGCGCTGCAGAAGCAGCGTCAGGCCGAGGAGACGGCGCCTTTGAGGAGGTGATGATGGACAT  
 CGGCTCCACTCGGTTACAGGCCAAAAGCTGCGACTGGCTTATACAAGGAGCTCCATTATGGTGGTTCT  
 CTGCCAATGTTAACCAGATTGGCTGTGGCCTGGCTGAGTTCCAGAGCCCCCTTCATTACCTTTGGATT  
 CATCTCGGAGCACTCGGCACCATGGATTGGTGGAACGGGTACAACGAGACCCTCGCAGAATGGTGTCCCC  
 ACTCCGCCGATACCCCGCCACATTGACAGTTCCTCCATAGCCCTGCCTACTTATCTCTCCCCCTGAG  
 TCTGGCTGGCGAAGGATGATGCCCTGGGGCAACCTCCCAGCTGAGAAGGGGCAGTTGTTTAGACTGCCAT  
 CTGCACCTAACAGGACAAGCTCTGACTCTGCTCTTACACAAGTGTGATGAACCTAACCCCAAGACAC  
 TTATCCAGGCCCTACACCTCCCAGTGTCTGCCCAGCCGGCGAGGAGTTTTCTGGATGGCGAGATGGAT  
 GCTAAAGTCCCTGCTATTGAGGAGAAGTTGGTAGATGACAAGCATTGCTGAAACCTTGGGATGCTAAGA  
 AGCTGTCTCATCTTCTCTCGACCTCGATCCTGTGAAGTCCCTGGAATCAACATCTTCCATCTCTGA  
 CCAGCCTGCTAATGTGCCTGTCTCCCACCTGCCATGAGCACAGGGGGCTCCCTACCTGACCTCACCAAC  
 CTACACTTCCCCCTCCACTGCCACGCCCTGGACCCTGAGGAGACAGTCTATCCCAGCCTGAGTGGGG  
 GCAACAGTACCACCAATTTGACTCACACTATGACCATTGGGCATCAGTGGAGGTCTGGCTTGGGCC  
 CAGCTATGATGTACCAGACTTCACTCACCTCTTAGCCACCCGTCCCTGCAGTCTCCCTAAGCAATCCC  
 AACCTCCAGGCTTCCCTAAGCAGTCTCAGCCCCAGCTCCAGGGCTCCCATAGTCACCCATCACTGCCTG  
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 CCAAGTCTAGTTATACCCAGCCATCCACCACCCAAAGTCTCTACAGCAGTTGCCCTCTCAGGCCCTGCT  
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 CAGTGGACATGGGCAACAGCCTTACCACCGCCCAATAAATGACTTCAGCCTGGGGATCTGGAGCAATC  
 AACATGGAGAGCCATCTACCAGCTGGTGTGGATCCCCTGCCTTTTCTGAAGTCTCTGGATTTTATG  
 GGAGTGGAGGATCAGTGAGTGGCCCCAGGACTCTCATGTCTCAATCACCAGAAGTTGACCCACTGTT  
 CCGCCATGGCTCAGGACCTAATATCATACTCACAGGAGACTTCCCCAGTTTTCTAAGGAGATTGCA  
 GCAGCCCTGGCTGGAGTACCTGGCTTTGAGGTGTGAGCATCTGGGTTGGAGCTGGGACTGGGGCTGGAAG  
 ATGAGTTGCGCATGGAGCCACTGGGCTGGAAGGACTAACCATGCTGAGTGACCTTGTGCTCTGCTGCC  
 TGACCTGCTGTGGAAGACTCATTCCGTAGTGATCGGCTACAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR210377 representing NM\_001033895  
Red=Cloning site Green=Tags(s)

MATSGANGPGSATASASNPRKFSEKIALQKQRQAEETAAFEVMMDIGSTR LQAQKLRLAYTRSSHYGGS  
 LPNVNQIGCGLAEFQSPLHSP L DSSRSTRHHGL VERVQRDPRRMVSP LRRYPRHIDSSPAYLSPPE  
 SGWRRMPWGNLPAEKGQLFRLPSALNRTSSDSALHTSVMNPNQDTPGTPPSVLPSRRGGFLDGEMD  
 AKVPAIEENLVDDKHL LKPWD AKKLSSSSSRPRSCEVPGINIFSPDQPANVPVLPAMSTGGSLPDLTN  
 LHFPPPLPTPLDPEETVYPSLSG N STTNLTHMTHLGISGGLGLGPSYDVPGLHSP LSHPSLQSSLSNP  
 NLQASLS SPQQLQGSHSPSLPASSLAHHALPTTSLGHPSLAPALSSSSSSSTSSPVL SAPPYPAST  
 PGASPRHRRVPLSPLSLPAGPADARRSQQLPKQFSPTMSPTLSSITQGVPLDTSKLPDQRLPPYPYSP  
 PSLVIPSPPTPKSLQQLPSQA CLVQPSGGQPGRQPHYGTLYPPGSSGHGQQPYHRPINDFSLGNLEQF  
 NMESPSTSLVLDPPAFSEGPGFLGSEGSVSGPQD SHVLNHQNLTHCSRHGSGPNIILTG DSSPGFSKEIA  
 AALAGVPGFEVSASGLELGLGLEDEL RMEPLGLEGLTMLSDPCALLPDPAVEDSFRSDRLQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001033895

**ORF Size:** 2073 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).

**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:** [NM\\_001033895.1](#), [NP\\_001029067.1](#)

**RefSeq Size:** 2076 bp

**RefSeq ORF:** 2076 bp

**Locus ID:** 310615

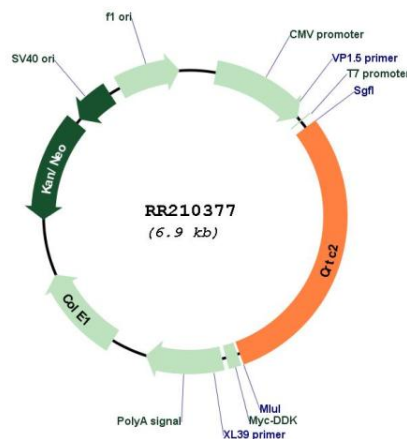
**UniProt ID:** [Q3LRZ1](#)

**Cytogenetics:** 2q34

**MW:** 73.1 kDa

**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 gluconeogenesis as a component of the LKB1/AMPK/TORC2 signaling pathway. Regulates the expression of specific genes such as the steroidogenic gene, StAR. Potent coactivator of PPARGC1A and inducer of mitochondrial biogenesis in muscle cells (By similarity). [UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RR210377