

Product datasheet for **MG210074**

Crtc2 (NM_028881) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Crtc2 (NM_028881) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Crtc2
Synonyms:	4632407F12Rik; mTORC2; Torc2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG210074 representing NM_028881
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGACGT CAGGGCGAACGGCCGGTTCCGCCACAGCCTCAGCGTCCAATCCACGCAAGTTTAGTG
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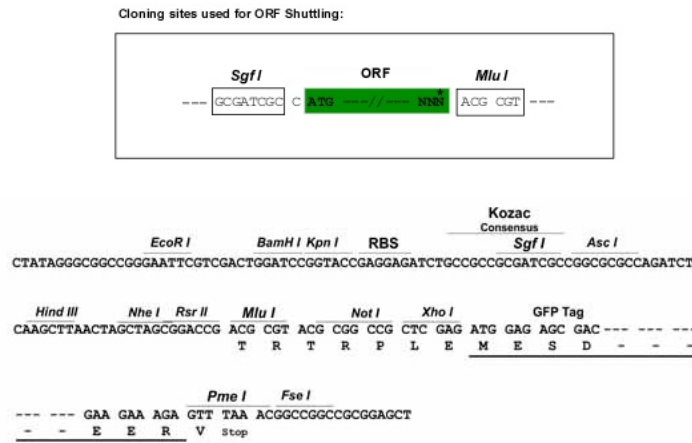
Protein Sequence: >MG210074 representing NM_028881
 Red=Cloning site Green=Tags(s)

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 SGWRRMPWGNLPAEKQQLFRLPSALNRTSSDSALHTSVMNPNQDTPGPTPPSVLPSRRGGGFLD GEM
 DAKVPAIEENVVDDKHL LKPWDAKKLS SSSSRPRSC E VPGINI F P S P D Q P A N V P V L P P A M N T G G S L P D L T
 NLHFPPPLPTPLDPEETVYPSLSGGNSTNLTHMTHLGISGGLGLGPSYDVPGLHSP LSHPSLQSSL SN
 PNLQASLSSPQPQLQGS SHPSLPASSLAHHALPTTSLGHPSLSAPALSSSSSSSTSSPVL SAPPYPAS
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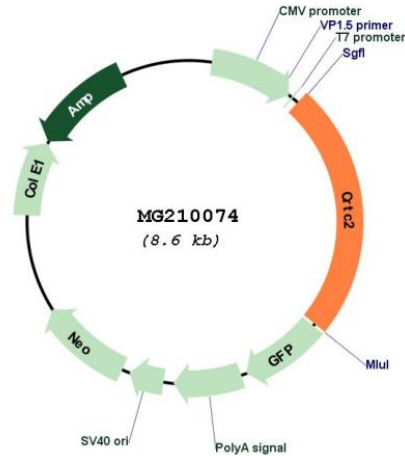
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_028881

ORF Size: 2076 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_028881.3](#)

RefSeq Size: 2675 bp

RefSeq ORF: 2079 bp

Locus ID: 74343

UniProt ID: [Q3U182](#)

Cytogenetics: 3 F1

Gene Summary: Transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites (PubMed:29211348). Acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated (PubMed:29211348). 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]