

Product datasheet for **MC220675**

Ccar2 (NM_146055) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ccar2 (NM_146055) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ccar2
Synonyms:	2610301G19Rik; Dbc1; mKIAA1967
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF:

>MC220675 representing NM_146055
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCCAGTTTAAAGCGCAGAGGATCAACCCACTTCCAGGGGGACGCAACTTCTCAGGCGCAGCTTCAA
 CATCTCTTTTGGGCCCTCCCCCTGGTCTACTTACTCCTCCTGTGGCCACAGACCTGTCCAAAATGCCAG
 GCACCTTCAGAGTGGGAAAAGCAGCGAGTCTTACAGGCATTGTTACCAGCTTGCATGACTACTTTGGG
 GTGGTAGATGAAGAAGTCTTTTTTCAGTAAGTGTGGTGAAGGGTCTGACTGCCAGCTGGGGGAGAAGG
 TGCTGGTGAAGGCCGATACAACCCAGGCCAGGCCGTGCCCTGGAATGCTGTCAAGGTGCAGACGCTCTC
 CAACCAGCCCTTACTGAAGTCTCCAGCGCTCCCTTCTGCACGTGCCAGCTCTGGGCCAGAAGCAAGGG
 ATCCTGGGAGCTCAGCCCAGCTGATCTTTCAGCCTCACCGAATCCCCCCTTTTCCCTCAGAAGCCTC
 TGAGTCTCTTCCAGACATCCACACACTTACCTGAGCCACTGAACAGATTTCTGCTCGGGTCTCTCA
 TGGAAGGCTGGACCAGGGCCGAAGTGTACTGACTGCAAGAAACGCAACAGCGGGCTGGCGGAGAG
 CCTTGGGGTGTAAAGAACTAGGCATGACCTGTCTCCTTACCGGTTTACTCTACTCCCTATACTGTGG
 ACAGTCCCACCTGTGACTTCTAGAACTGCAGCGACGTTACCGCAGCCTGTTGGTCCCCTCAGATTTCTT
 TTCGGTCACTTGAGCTGGCTGTGAGCCTTCCCTCTGGGCCAGCCCTTTTCCCTCCACCACCAAGTCGG
 ATCCAGGTCTCTTTCAGAGAAGGAGGCAGCTCCAGACACTGGTGTGAGCCAGCCCTGAGGACAGTGACC
 CCATTTACAGTCCAAGGTGCTGCTGCTCCTCCCCAGGCCGGAGGAGTTCTATCGTTGCTGCATGCT
 GTTTGTGGATGACATGGCTGAGCCAAGGGAGACACCAGAGCATCCTCTGAAGCAGCTAAAGTTTTGCTG
 GGCCGAAAGAAGAAGAGGCAGTGTGGTTGGGGTGTGGTCTCCTTCCCTGGATGGCCTCGACCCCC
 AGGCACCCCGCAGGTGCTGGTGGCAGCCATCCGCTGTGCACAAGCCAGACTGGCATTGAGTGTGAG
 CACTGCACCAAATGGTGGCGCTTGTGAGTTTCACTACTTACAGCCGGGGCCCGCCCGCAGTTACAC
 ACAGTAGTGGTGTACCTGCCAGACGTGTGGACCATCATGCCACTTTGGAGGAGTGGGAGGCACTGTGCC
 AACAGAAAGCCACGGAGGCAGCTCCCCAACCATGAGGCATCAGGGGAAGCAGAGGCTACTGAACAGGC
 TCCTGATGTGTCAGAGCAAGCAGACACTTAAACAGAACACAGAGACAATGGAGGCCACCACACAGCAA
 GATGTGGACACTGATCTCCAGAGGCCCTCCGCCTCCTCTAGAACCTGCTGTGATGGCCGCTCCTCGCT
 GTGTCAACCTGTCTTTATGGAATTGTGGAGGATCGGAGGCCAAAAGAAAGGATCTCTTTTGGGTAGT
 GGTGCTGGCTGAGCTGTTTGTAGAGATGCTGCAGAGGGATTTGGCTATAGAATTTATAAGACGCTGCTG
 AGCCTTCCAGAAAAGTTGTGTCTCCTCCTGAACCTGAGAAGGAGGAGGCCAGCAAAGAAGATGCGGTCA
 AAGAGGAGGAGGCTGTCAAAGAGGAGGCAGTGAAGGTGTCCAAGGATGAGGTACAGAATGAGGGCACAGC
 TGCCGAGTCAGACAGCCACTGAAGGAGGATGGGCTTCTGCCAAACGGCCCTTTCAGGGGGAGAAGAG
 GAGGAAAAGGCCCGGGGCGAGGGCGCTGAGGACCTCTGTGAGATGGCCTTGGACCCAGACCTGCTGCTGC
 TGCGGGATGATGGAGAGGACGAATTTGCAGGAGCAAAGCTAGAGGAAACAGAGGTTGTTTCTGTTGCCTC
 AAACAGTCAGAGATGGAATATCTTCTCTTCCAGGACATGCCTAAGGAGCTGGATCCCTCAACTGTGCTC
 CCCCTGGACTGTCTTTTGGCTTTTGTGTTTTTGTGATGCCAACTGGTGTGGCTACTTGCACAGGCGAGACT
 TGGAGAGGGTCTCCTCACACTAGGATCCGGCTCAGTGCAGAGCAGGCCAAACAGTTGGTTAGTAGAGT
 GGTGGCACAACAATCTGCCAGTACCGGACCTTCACTACAGCCGTGCTGAAGTGTGGACGATGGCCTT
 CCTGAAGACGTGCTCTTCGAAAACCTGGATCTACTGCCTCCTTACAGGAAAGAGCACAAAGCCAGGTGCTG
 CCCCCACAGAGCACAAAGGCCTGGTGGCCACAATGGTAGCCTCATCAATGTGGGAAGCCTGTTACAGCG
 TGCAGAGCAGCAAGACAGTGGCCGCTATACCTGGAGAACAAGATTACACACTGGAAGTGAAGCTTGGAG
 GAGAGCCATAACCGCTTCTCAGCCACTGAGGTGACAAAATAAGACTGAGCAGCAGAGATGCAGGAGCTGC
 GGGCCCGCTGGCCGAGGAGGAGGACGGCCGACAGCAGAGCGACAGAAAGAACAGCTCCAGCGACA
 GATGCAGGACTTCCGACGGCCTGACCCACTGCACCTTGAAGTGCAGCGGATTGTTGAGAAGGCTGAC
 AGCTGGGTAGAGAAAGAAGGCCAACGCCTAGCAACTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:	NM_146055
Insert Size:	2769 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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_146055.3</u> , <u>NP_666167.3</u>
RefSeq Size:	3705 bp
RefSeq ORF:	2769 bp
Locus ID:	219158
UniProt ID:	<u>Q8VDP4</u>
Cytogenetics:	14 D2

Gene Summary:

Core component of the DBIRD complex, a multiprotein complex that acts at the interface between core mRNP particles and RNA polymerase II (RNAPII) and integrates transcript elongation with the regulation of alternative splicing: the DBIRD complex affects local transcript elongation rates and alternative splicing of a large set of exons embedded in (A + T)-rich DNA regions. Inhibits SIRT1 deacetylase activity leading to increasing levels of p53/TP53 acetylation and p53-mediated apoptosis (By similarity). As part of a histone H3-specific methyltransferase complex may mediate ligand-dependent transcriptional activation by nuclear hormone receptors (By similarity). Inhibits SUV39H1 methyltransferase activity. Plays a critical role in maintaining genomic stability and cellular integrity following UV-induced genotoxic stress (By similarity) Regulates the circadian expression of the core clock components NR1D1 and ARNTL/BMAL1. Enhances the transcriptional repressor activity of NR1D1 through stabilization of NR1D1 protein levels by preventing its ubiquitination and subsequent degradation. Acts as a regulator of PCK1 expression and gluconeogenesis by a mechanism that involves, at least in part, both NR1D1 and SIRT1 (PubMed:24415752). Negatively regulates the deacetylase activity of HDAC3 and can alter its subcellular localization (PubMed:21030595). Plays an important role in tumor suppression through p53/TP53 regulation; stabilizes p53/TP53 by affecting its interaction with ubiquitin ligase MDM2 (PubMed:25732823). Represses the ligand-dependent transcriptional activation function of ESR2. Positively regulates the beta-catenin pathway (canonical Wnt signaling pathway) and is required for MCC-mediated repression of the beta-catenin pathway. Represses ligand-dependent transcriptional activation function of NR1H2 and NR1H3 and inhibits the interaction of SIRT1 with NR1H3. Represses the transcriptional activator activity of BRCA1. Inhibits SIRT1 in a CHEK2 and PSEM3-dependent manner and inhibits the activity of CHEK2 in vitro (By similarity).[UniProtKB/Swiss-Prot Function]