

Product datasheet for TP511192

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Ccar2 (NM_146055) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse cell cycle activator and apoptosis regulator 2 (Ccar2),

with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone >MR211192 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSQFKRQRINPLPGGRNFSGAASTSLLGPPPGLLTPPVATDLSQNARHLQSGEKQRVFTGIVTSLHDYFG
VVDEEVFFQLSVVKGRLPQLGEKVLVKAAYNPGQAVPWNAVKVQTLSNQPLLKSPAPPLLHVAALGQKQG
ILGAQPQLIFQPHRIPPLFPQKPLSLFQTSHTLHLSHLNRFPARGPHGRLDQGRSDDYDSKKRKQRAGGE
PWGAKKPRHDLSPYRVHLTPYTVDSPTCDFLELQRRYRSLLVPSDFLSVHLSWLSAFPLGQPFSLHHPSR
IQVSSEKEAAPDTGAEPSPEDSDPTYSSKVLLLSSPGLEEFYRCCMLFVDDMAEPRETPEHPLKQLKFLL
GRKEEEAVLVGGEWSPSLDGLDPQADPQVLVRTAIRCAQAQTGIDLSTCTKWWRFAEFQYLQPGPPRQLH
TVVVYLPDVWTIMPTLEEWEALCQQKATEAAPQPHEASGEAEATEQAPDVSEQADTSKQNTETMEATTQQ
DVDTDLPEAPPPPLEPAVMARPRCVNLSLYGIVEDRRPKERISFEVVVLAELFVEMLQRDFGYRIYKTLL
SLPEKVVSPPEPEKEEAAKEDAVKEEEAVKEEAVKVSKDEVQNEGTAAESDSPLKEDGLLPKRPSSGGEE
EEKARGEAAEDLCEMALDPDLLLLRDDGEDEFAGAKLEETEVRSVASNQSEMEYSSLQDMPKELDPSTVL
PLDCLLAFVFFDANWCGYLHRRDLERVLLTLGIRLSAEQAKQLVSRVVAQNICQYRSLQYSRAEVLDDGL
PEDVLFGNLDLLPPSGKSTKPGAAPTEHKGLVPHNGSLINVGSLLQRAEQQDSGRLYLENKIHTLELKLE
ESHNRFSATEVTNKTLAAEMQELRARLAEAEETARTAERQKNQLQRQMQDFRRRLTPLHLEMQRIVEKAD

SWVEKEEPTPSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 103 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol





Ccar2 (NM_146055) Mouse Recombinant Protein - TP511192

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: <u>NP 666167</u> **Locus ID:** 219158

UniProt ID: Q8VDP4

RefSeq Size: 3705 Cytogenetics: 14 D2 RefSeq ORF: 2769

Synonyms: 2610301G19Rik; Dbc1; mKIAA1967

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

(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]