

Product datasheet for **MR207764**

Cdc14b (NM_172587) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdc14b (NM_172587) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdc14b
Synonyms:	2810432N10Rik; A530086E13Rik; AA472821; Cdc14B1; CDC14B3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR207764 representing NM_172587
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGAAGCGTAAGAGCGAGCGCGCTCGGCTTGGGCCACCGCGCCCCCTGCTCACGCCGAGCTCGTCT
 CCTCTCCCGCGTGAAGAAGAGCCGAGCTCCACGCCGAGGAGCTGCACCGCTGGAGCAGCAGGACGA
 CCTGTACCTGGACATCACGGATCGCCTTTGTTTTGCCATTCTCTACAGCAGACCAAGAGTGCAACAAAC
 GAACATTATTTACAGATAGATAACGAGCTAGAGTATGAGAACTTCTATGCGGATTTGGACCACTCAATC
 TGGCCATGGTTTACAGATATTGTTGCAAGATAAATAAGAAGCTCAAGTCCATTACAATGCTGAGGAAGAA
 AATTATCCATTTACTGGCACTGATCAGAGAAAGCAAGCGAATGCCGCCTTCTGTGCGGTGTTATATG
 GTTATATATTTGGGGAGGACACCAGAAGACGCGTATAGAACATTAATCTCGGAGATACAGCCTATATTC
 CTTTCAGAGATGCTGCCTATGGAAGCTGCAGTTTCTATATTACACTTCTCGACTGTTTTCCAGCAGTAAA
 GAAGGCAATGCAGTATGGCTTCTTAATTTCAACTCATTTAACCTTGACGAATATGAACACTATGAAAAA
 GCAGAAAAATGGAGATTTCAACTGGATAATACCAGAGCGATTTCTTGCCTTCTGTGGGCCCCATTCAAGT
 CCAGGCTGGAAAGTGTTACCACCAACATTCTCCGGAGACTTATATTCCATATTTAAGAATCACAATGT
 AACTACCATTTCTGCTGAATAAAAGGATGTATGATGCTAAGCGCTTACGGATGCTGGATTCCGATCAC
 CATGATCTTTTCTTCCGGATGGCAGCACCCCTGCTGAGTCAATTGTCCAAGAATTTCTGGATATTTGTG
 AAAATGTCAAGGGTGCCATTGCTGTGCATTGCAAAGCTGGCCTTGGTCAACAGGCACTCTGATAGGCTG
 CTACCTCATGAAGCATTACAGGATGACAGCAGCTGAGAGCATTGCCTGGCTCAGAATCTGTAGACCCGGC
 TCAGTAATTGGGCCCCAGCAACAGTTTCTGGTCATGAAACAATCAAGCCTCTGGCTAGAAGGCGACTATT
 TCCGTCAAAAGTTAAGAGGGCAGGAGAATGGCCCCCTCAGAGAAGCCTTCCAAACACCTTTCGAGATG
 TGATGACCTGTCCTTAAATGGGCTTGAAGATCAAGACAATCAAGAGCCTGAGCCGTATAGTGATGATGAT
 GAAGTCAGTGAATGACACAAGGAGACAGACTTGGGCCCTGAAAAGCCGGAGACAGCCGAAGCCAGCG
 CTATCCCCCTCACATGTCCCCTAGCTGTGCTGACCTCTGCACTGTGTAGTGTGCCATCTGGTGGATTGT
 GTGTGACTACATTCTCCACCCTGCTGTTCTGTCTTGTGGCTCAGAACACAG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207764 representing NM_172587
 Red=Cloning site Green=Tags(s)

MKRKSERRSAWATAPPCSRSSSSSPGVKKSRSSTPQELHRLEQQDDL YLDITDRLCFAILYSRPKSATN
 EHYFSIDNELEYENFYADFGPLNLAMVYRYCCKINKKLKSITMLRKKIIHFTGTDQRKQANAFLVGCYM
 VIYLRTPEDAYRTLIFGDTAYIPFRDAAYGSCSFYITLLDFHAVKKAMQYGFNFNSFNLDEYEHYK
 AEENGDFNWIIPERFLAFCGPHSRSRLESYHQHSPETYIPYFKNHVTTIIRLNKMYDAKRFDTAGFDH
 HDLFFPDGSTPAESIVQEFLDICENVKGAIAVHCKAGLGRGTGLIGCYLMKHYRMTAAESIAWLRICRPG
 SVIGPQQQFLVMKQSSLWLEGDYFRQKLRQENGLREAFSKHLSADDDLSLNLENQDNQEPYSDDD
 EVSGMTQGDRRLALKSRRQPKASAIPLTCPLAVLTSALCSVAIWWIVCDYILPTLLFCLDGFRTQ

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9081_e01.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_172587

ORF Size: 1455 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_172587.3](#), [NP_766175.3](#)

RefSeq Size: 5859 bp

RefSeq ORF: 1458 bp

Locus ID: 218294

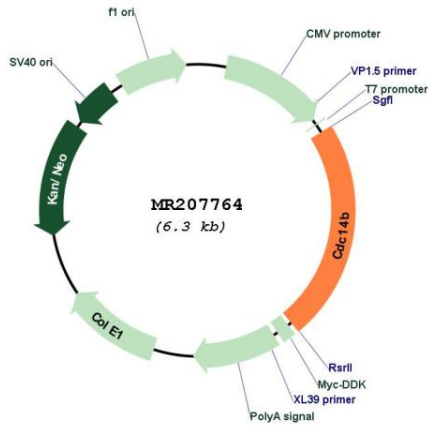
UniProt ID: [Q6PFY9](#)

Cytogenetics: 13 B3

MW: 55.7 kDa

Gene Summary: Dual-specificity phosphatase involved in DNA damage response. Essential regulator of the G2 DNA damage checkpoint: following DNA damage, translocates to the nucleus and dephosphorylates FZR1/CDH1, a key activator of the anaphase promoting complex/cyclosome (APC/C). Dephosphorylates SIRT2 around early anaphase. Dephosphorylation of FZR1/CDH1 activates the APC/C, leading to the ubiquitination of PLK1, preventing entry into mitosis. Preferentially dephosphorylates proteins modified by proline-directed kinases (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207764