

Product datasheet for **MG207764**

Cdc14b (NM_172587) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdc14b (NM_172587) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cdc14b
Synonyms:	2810432N10Rik; A530086E13Rik; AA472821; Cdc14B1; CDC14B3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG207764 representing NM_172587
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGCGTAAGAGCGAGCGCGCTCGGCTTGGGCCACCGCGCCCCCTGCTCACGCCGAGCTCGTCT
 CCTCTCCCGCGTGAAGAAGAGCCGAGCTCCACGCCGAGGAGCTGCACCGCTGGAGCAGCAGGACGA
 CCTGTACCTGGACATCACGGATCGCCTTTGTTTTGCCATTCTCTACAGCAGACCAAGAGTGCAACAAAC
 GAACATTATTTACAGCATAGATAACGAGCTAGAGTATGAGAACTTCTATGCGGATTTGGACCACTCAATC
 TGGCCATGGTTTACAGATATTGTTGCAAGATAAATAAGAAGCTCAAGTCCATTACAATGCTGAGGAAGAA
 AATTATCCATTTACTGGCACTGATCAGAGAAAGCAAGCAATGCCGCCTTCTGTGCGGTGTTATATG
 GTTATATATTTGGGGAGGACACCAGAAGACGCGTATAGAACATTAATCTCGGAGATACAGCCTATATTC
 CTTTCAGAGATGCTGCCTATGGAAGCTGCAGTTTCTATATTACACTTCTCGACTGTTTTCCAGCAGTAAA
 GAAGGCAATGCAGTATGGCTTTTAATTTCAACTCATTTAACCTTGACGAATATGAACACTATGAAAAA
 GCAGAAAATGGAGATTTCAACTGGATAATACCAGAGCGATTTCTTGCCTTCTGTGGGCCCCATTCAAGT
 CCAGGCTGGAAAGTGTTACCACCAACATTCTCCGGAGACTTATATTCCATATTTAAGAATCACAAATGT
 AACTACCATTTTCGCTGAATAAAAGGATGTATGATGCTAAGCGCTTTACGGATGCTGGATTCCGATCAC
 CATGATCTTTTCTTCCGGATGGCAGCACCCCTGCTGAGTCAATTGTCCAAGATTTCTGGATATTTGTG
 AAAATGTCAAGGGTGCCATTGCTGTGCATTGCAAAGCTGGCCTTGGTGAACAGGCACTCTGATAGGCTG
 CTACCTCATGAAGCATTACAGGATGACAGCAGCTGAGAGCATTGCCTGGCTCAGAATCTGTAGACCCGGC
 TCAGTAATTGGGCCCCAGCAACAGTTTCTGGTCATGAAACAATCAAGCCTCTGGCTAGAAGGCGCAATT
 TCCGTCAAAAGTTAAGAGGGCAGGAGAATGGCCCCCTCAGAGAAGCCTTCCAAACACCTTTCCGATGC
 TGATGACCTGTCCTTAAATGGGCTTGAATCAAGACAATCAAGAGCCTGAGCCGTATAGTGATGATGAT
 GAAGTCAGTGAATGACACAAGGAGACAGACTTCCGGCCCTGAAAAGCCGGAGACAGCCGAAAGCCAGCG
 CTATCCCCCTCACATGTCCCCTAGCTGTGCTGACCTCTGCACTGTGTAGTGTGCCATCTGGTGGATTGT
 GTGTGACTACATTCTCCACCCTGCTGTTCTGTCTTGTGGCTTCAGAACACAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

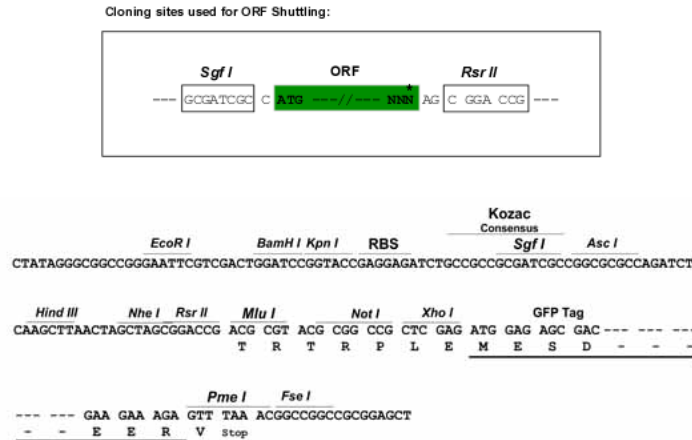
>MG207764 representing NM_172587
 Red=Cloning site Green=Tags(s)

MKRKSERRSAWATAPPCSRSSSSSPGVKKSRSSTPQELHRLEQQDDL YLDITDRLCFAILYSRPKSATN
 EHYFSIDNELEYENFYADFGPLNLMVYRYCCKINKKLSITMLRKKIIHF TGTDRKQANA AFLVGCYM
 VIYLRTPEDAYRTLIFGDTAYIPFRDAA YGSCSFYITLLDCFHAVKKAMQYGFNFNSFNLDEYEHYK
 AENGFDFNWIIIPERFLAF CGPHSRSRLESYH QHSPETYIPYFKNHVTTIIRLNK RMYDAKRF TDAGFDH
 HDLFFPDGSTPAESIVQEF LDICENVKGA IAVHCKAGLGR TGTLIGCYLMKH YRMTAAESI AWLRICRPG
 SVIGPQQQFLVMKQSSLWLEGDYFRQKLRGQENGLREAFSKHLS DADDLSLNGLENQDNQEPYSDDD
 EVSGMTQGDRRLALKSR RQPKASAIPLTCPLAVLTSALCSVAIWWIVCDYILPTLLFCLDGFRTQ

SGP**TRRRLE** - GFP Tag - V

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

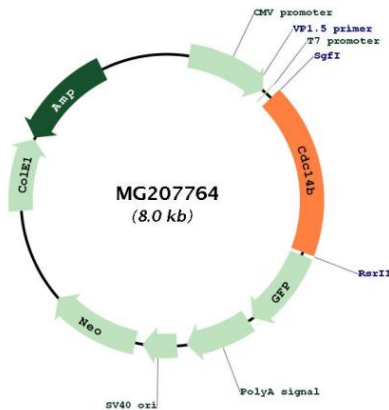
Locus ID: 218294

UniProt ID: [Q6PFY9](#)

Cytogenetics: 13 B3

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 MG207764