

## Product datasheet for **MC216713**

### **Cdc14b (NM\_172587) Mouse Untagged Clone**

#### **Product data:**

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



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**Fully Sequenced ORF:** >MC216713 representing NM\_172587  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGGATCGCC

ATGAAGCGTAAGAGCGAGCGGCCGCTCGGCTTGGGCCACCGCGCCCCCTGCTCAGCCGAGCTCGTCT  
CCTCTCCCGCGTGAAGAAGAGCCGAGCTCCACGCCGAGGAGCTGCACCGCCTGGAGCAGCAGGACGA  
CCTGTACTCGGACATCACGGATCGCCTTTGTTTTGCCATTCTCTACAGCAGACCAAGAGTGCAACAAAC  
GAACATTATTTACAGCATAGATAACGAGCTAGAGTATGAGAACTTCTATGCGGATTTTGGACCACTCAATC  
TGGCCATGGTTTACAGATATTGTTGCAAGATAAATAAGAAGCTCAAGTCCATTACAATGCTGAGGAAGAA  
AATTATCCATTTACTGGCACTGATCAGAGAAAGCAAGCAATGCCGCCTTCTGTGCGGTGTTATATG  
GTTATATATTTGGGGAGGACACCAGAAGACGCGTATAGAACATTAATCTTCGGAGATACAGCCTATATTC  
CTTTCAGAGATGCTGCCTATGGAAGCTGCAGTTTCTATATTACACTTCTCGACTGTTTTACGCAGTAAA  
GAAGGCAATGCAGTATGGCTTTAATTTCAACTCATTTAACCTTGACGAATATGAACACTATGAAAAA  
GCAGAAAAATGGAGATTTCAACTGGATAATACCAGAGCGATTTCTTGCCTTCTGTGGGCCCCATTCAAGAT  
CCAGGCTGGAAAGTGGTTACCACCAACATTCTCCGGAGACTTATATTCCATATTTAAGAATCACAAATGT  
AACTACCATTATTCGTCTGAATAAAAGGATGTATGATGCTAAGCGCTTACGGATGCTGGATTGATCAC  
CATGATCTTTTCTTCCGGATGGCAGCACCCCTGCTGAGTCAATTGTCCAAGAATTTCTGGATATTTGTG  
AAAATGTCAAGGGTGCCATTGCTGTGCATTGCAAAGCTGGCCTTGGTCAACAGGCACTCTGATAGGCTG  
CTACCTCATGAAGCATTACAGGATGACAGCAGCTGAGAGCATTGCCTGGCTCAGAATCTGTAGACCCGGC  
TCAGTAATTTGGGCCCCAGCAACAGTTTCTGGTCATGAAACAATCAAGCCTCTGGCTAGAAGGCGACTATT  
TCGGTCAAAAAGTTAAGAGGGCAGGAGAATGGCCCCCTCAGAGAAGCCTTCTCAAACACCTTTCCGATGC  
TGATGACCTGTCTTAAATGGGCTTGAGAAATCAAGACAATCAAGAGCCTGAGCCGTATAGTGATGATGAT  
GAAGTCAGTGGAATGACACAAGGAGACAGACTTCGGGCCCTGAAAAGCCGGAGACAGCCGAAAGCCAGCG  
CTATCCCCCTCACATGTCCCCTAGCTGTGCTGACCTCTGCACTGTGTAGTGTGTCATCTGGTGGATTGT  
GTGTGACTACATTCTCCACCCTGCTGTTCTGTCTTGTGATGGCTCAGAACACAGTAG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-RsrII

**ACCN:** NM\_172587

**Insert Size:** 1458 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:**

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]  
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).