

Product datasheet for **RC215766**

CDC25B (NM_021872) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC25B (NM_021872) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDC25B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC215766 representing NM_021872
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAGGTGCCCCAGCCGGAGCCCGCGCCAGGCTCGGCTCTCAGTCCAGCAGGCGTGTGCGGTGGCGCCCAGCGTCCGGGCCACCTCCCGGGCTCCTGCTGGGATCTCATGGCCTCCTGGGGTCCCGGTGCGGGCGGCCGTTCTCGCCGGTCAACCACCTCACCCAGACCATGCACGACCTCGCCGGGCTCGGCAGCGAAACCCCAAGAGTCAGGTAGGGACCTGCTCTTCCGCAGCCGCAGCCGCTGACGCACCTATCCCTGTCTCGACGGGCATCCGAATCCTCCCTGCTGCTGAATCCTCCGAATCTTCTGATGCAGGTCTCTGCATGGATTCCCCCAGCCCTATGGACCCACATGGCGGAGCAGACGTTTGAACAGGCCATCCAGGCAGCCAGCCGGATCATTGCAACGAGCAGTTTGCCATCAGACGCTTCCAGTCTATGCCGGTGGAGCTGCTGGGCCACAGCCCGTGTTCGGAACATCACCACTCCAGGCGCCGACGGCCGAGGAAGAGCGAGGCGGGCAGTGGAGCTGCCAGCAGCTCTGGGAAGACAAGGAGAATGATGGATTTGTCTTCAAGATGCCATGGAAGCCACACATCCCAGCTCCACCCATGCTCTGGCAGAGTGGGCCAGCCGAGGAAGCCTTTGCCAGAGACCCAGCTCGGCCCCCGACCTGATGTGTCTCAGTCTGACCGGAAGATGGAAGTGGAGGAGCTCAGCCCCCTGGCCCTAGGTCGTTCTCTGACCCCTGCAGAGGGGGATACTGAGGAAGATGATGGATTTGTGGACATCCTAGAGAGTGACTTAAAGATGATGATGCAGTTCCTCCAGGCATGGAGAGTCTCATTAGTGCCCCACTGGTCAAGACCTTGGAAAAGGAAGAGGAAAAGGACCTCGTCATGTACAGCAAGTCCAGCGGGCTCTTCCGCTCTCCGTCCATGCCCTGCAGCGTGATCCGGCCCATCCTCAAGAGGCTGGAGCGGCCAGGACAGGGACACGCCGTGCAGAATAAGCGGAGGCGGAGCGTGACCCCTCCTGAGGAGCAGCAGGAGGCTGAGGAACCTAAAGCCCGCTCCTCCGCTCAAATCAGTGTGTACAGATGAGATCGAGAACCTCCTGGACAGTACCACCGAGAGCTGATTGGAGATTACTTAAGGCCTTCTCCTACAGACAGTAGACGGAAAGCACCAAGACCTCAAGTACATCTCACCAGAAACGATGTGGCCCTATTGACGGGCAAGTTCAGCAACATCGTGGATAAGTTTGTGATTGTAGACTGCAGATACCCCTATGAATATGAAGGCGGGCACATCAAGACTGCGGTGAACCTGCCCCGGAACGCGACGCCGAGAGTCTCTACTGAAGAGCCCCATCGCGCCCTGTAGCCTGGACAAGAGAGTCACTCATTTCCTACTGTGAATTTCTCATCTGAGCGTGGGCCCGCATGTGCCGTTTTCATCAGGGAACGAGACCGTGTCAACGACTACCCAGCCTACTACTACCTGAGATGTATATCCTGAAAGGCGGCTACAAGGAGTTCTTCCCTCAGCACCCGAACTCTGTGAACCCAGGACTACCGGCCATGAACCACGAGGCTTCAAGGATGAGCTAAAGACCTTCCGCTCAAGACTCGCAGCTGGGCTGGGAGCGGAGCCGCGGGAGCTCTGTAGCCGGTGCAGGACCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215766 representing NM_021872
 Red=Cloning site Green=Tags(s)

MEVPQPEPAPGSALSPAGVCGGAQRPGHLPGLLLGSHGLLGSPVRAAASSPVTTLTQTMHDLAAGLSETPKSQVGTLLFRSRSLTHLSLRRASESSLSESSSDAGLCMDSPSPMDPHMAEQTFEQAIQAASRIIRNEQFAIRRFQSMVRLLGHSPVLRNITNSQAPDGRKSEAGSAAASSGEDKENDGFVFKMPWKPTHSSTHALAEWASRREAFQRPSSAPDLMCLSPDRKMEVEELSPLALGRFSLTPAEGDTEEDDGFVDILESCLKDDDAPPPGMESLISAPLVKLEKEEEKDLVMYSKQRLFRSPSMPCSVIRPILKRLERPQDRDTPVQNKRRRSVTPPEEQEAEPEKARVLRSLCHDEIENLLDSDHRELIGDYSKAFLLQTVDGKHQDLKYISPETMVALLTGKFSNIVDKFVIDCRYPEYEGGHIKTAVNPLERDAESFLLKSPIAPCSLDRKRVILIFHCEFSERGPRMCRFIRERDRAVNDYPSLYPEMYILKGGYKEFFQHPNFCPEQDYRPMNHEAFKDELKTFRLKTRSWAGERSRRELCSRLQDQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_021872

ORF Size: 1740 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 Size: 3578 bp

RefSeq ORF: 1620 bp

Locus ID: 994

UniProt ID: [P30305](#)

Cytogenetics: 20p13

Domains: RHOD

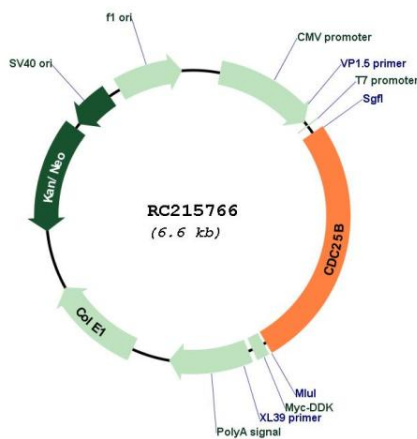
Protein Families: Druggable Genome, Phosphatase

Protein Pathways: Cell cycle, MAPK signaling pathway, Progesterone-mediated oocyte maturation

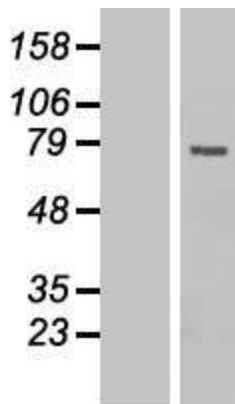
MW: 60.6 kDa

Gene Summary: CDC25B is a member of the CDC25 family of phosphatases. CDC25B activates the cyclin dependent kinase CDC2 by removing two phosphate groups and it is required for entry into mitosis. CDC25B shuttles between the nucleus and the cytoplasm due to nuclear localization and nuclear export signals. The protein is nuclear in the M and G1 phases of the cell cycle and moves to the cytoplasm during S and G2. CDC25B has oncogenic properties, although its role in tumor formation has not been determined. Multiple transcript variants for this gene exist. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC215766



Western blot validation of overexpression lysate (Cat# [LY411901]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215766 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).