

Product datasheet for **RC238677**

CDC25B (NM_001287516) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC25B (NM_001287516) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDC25B
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238677 representing NM_001287516
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCACAGCGAAACCCAAAGAGTCAGGTAGGGACCTGCTCTCCGAGCCGACGCCCTGACGCACC
 TATCCCTGTCTCGACGGCATCCGAATCCTCCCTGCTGCTGAATCCTCCGAATCTTCTGATGCAGGTCT
 CTGCATGGATTCCCCAGCCCTATGGACCCACATGGCGGAGCAGACGTTTGAACAGGCCATCCAGGCA
 GCCAGCCGGATCATTGAAACGAGCAGTTTGCATCAGACGCTTCCAGTCTATGCCGGTGGAGCTGCTGG
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 CAGTGGAGCTGCCAGCAGCTCTGGGAAGACAAGGAGAATGATGGATTTGTCTTCAAGATGCCATGGAAG
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 CCAGCTCGGCCCGACCTGATGTGTCTCAGTCTGACCGGAAGATGGAAGTGGAGGAGCTCAGCCCCT
 GGCCCTAGGTCGTTCTCTCTGACCCCTGCAGAGGGGATACTGAGGAAGATGATGGATTTGTGGACATC
 CTAGAGAGTGACTTAAAGGATGATGATGCAGTTCGCCAGGCATGGAGAGTCTCATTAGTCCCCACTGG
 TCAAGACCTTGGAAAAGGAAGAGAAAAGGACCTCGTCAATGTACAGCAAGTGCCAGCGGCTCTCCGCTC
 TCCGTCCATGCCCTGCAGCGTATCCGGCCATCCTCAAGAGGCTGGAGCGGCCCCAGGACAGGGACACG
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 CCCGCTCCTCCGCTCAAATCACTGTGTACGATGAGATCGAGAACCTCCTGGACAGTGACCACCGAGA
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 ATCTCACCAGAAACGATGGTGGCCCTATTGACGGCAAGTTCAGCAACATCGTGGATAAGTTTGTGATTG
 TAGACTGCAGATACCCCTATGAATATGAAGCGGGCACATCAAGACTGCGGTGAACCTGCCCTGGAACG
 CGACGCCGAGAGCTTCTACTGAAGAGCCCATCGCGCCCTGTAGCTGGACAAGAGAGTATCCTCATT
 TTCCACTGTGAATTCTCATCTGAGCGTGGGCCCGCATGTGCCGTTTCATCAGGGAACGAGACCGTGCTG
 TCAACGACTACCCAGCCTCTACTACCCTGAGATGTATATCCTGAAAGCGGCTACAAGGAGTTCTTCCC
 TCAGCACCCGAACCTTCTGTGAACCCAGGACTACCGCCCATGAACCACGAGGCTTCAAGGATGAGCTA
 AAGACCTCCGCCTCAAGACTCGCAGCTGGGCTGGGGAGCGGAGCCGGGGAGCTCTGTAGCCGGCTGC
 AGGACCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238677 representing NM_001287516
 Red=Cloning site Green=Tags(s)

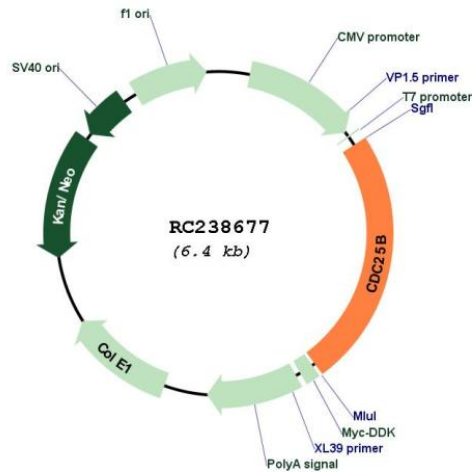
MHSETPKSQVGTLLFRSRSLTHLSLRRASESSLSESSESSDAGLCMDSPSPMDPHMAEQTFEQAIQA
 ASRIIRNEQFAIRRFQSMVRLLGHPVLRNITNSQAPDGRRKSEAGSGAASSSGEDKENDGFVFKMPWK
 PTHPSSTHALAEWASRREAFQRPSSAPDLMCLSPDRKMEVEELSPLALGRFSLTPAEGDTEEDDGFVDI
 LESDLKDDAVPPGMESLISAPLVKLEKEEEKDLVMYSKCQQLFRSPSMPCSVIRPILKRLERPQDRDT
 PVQNKRRRSVTPPEEQEAEKPKARVLRSLCHDEIENLLSDHRELIGDYSKAFLLQTVDGKHQDLKY
 ISPETMVALLTGKFSNIVDKFVI VDCRYPYEYEGGHIKTAVNPLERDAESFLLKSPIAPCSLDKRVILI
 FHCEFSSERGP MCRFIRERDRAVNDYPSLYPEMYILKGGYKEFFPQHPNFCEPQDYRPMNHEAFKDEL
 KTFRLKTRSWAGERSRRELCSRLQDQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Plasmid Map:



ACCN: NM_001287516

ORF Size: 1548 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:	<ol style="list-style-type: none">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:	<u>NM_001287516.1</u> , <u>NP_001274445.1</u>
RefSeq Size:	3071 bp
RefSeq ORF:	1551 bp
Locus ID:	994
Cytogenetics:	20p13
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	Cell cycle, MAPK signaling pathway, Progesterone-mediated oocyte maturation
MW:	59.3 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]