

## Product datasheet for **RC238590**

### **CDC25B (NM\_001287517) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CDC25B (NM_001287517) 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:**

>RC238590 representing NM\_001287517  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCACAGCCGACGCCGCTGACGCACCTATCCCTGTCTCGACGGGCATCCGAATCTCCCTGTCGTCG  
 AATCCTCCGAATTTCTGATGCAGGTCTCTGCATGGATCCCCAGCCCTATGGACCCCATGCGCGA  
 GCAGACGTTTGAACAGGCCATCCAGGCAGCCAGCCGGATCATTGAAACGAGCAGTTTGCCATCAGACGC  
 TTCCAGTCTATGCCGGTGAGGCTGCTGGGCCACAGCCCGTGCTTCGAAACATCACCAACTCCCAGGCGC  
 CCGACGGCCGGAGGAAGAGCGAGGCGGGCAGTGGAGCTGCCAGCAGCTCTGGGGAAGACAAGGAGAATGA  
 TGGATTTGTCTTCAAGATGCCATGGAAGCCACACATCCCAGCTCCACCCATGCTCTGCCAGAGTGGGCC  
 AGCCGCAGGGAAGCCTTTGCCAGAGACCCAGCTCGGCCCGACCTGATGTGTCTCAGTCTGACCGGA  
 AGATGGAAGTGGAGGAGCTCAGCCCTGGCCCTAGTTCGCTTCTCTGACCCCTGCAGAGGGGATAC  
 TGAGGAAGATGATGGATTTGTGGACATCTAGAGAGTGACTTAAAGGATGATGATGCAGTCCCCAGGC  
 ATGGAGAGTCTCATTAGTGCCTTGGTCAAGACCTTGAAAAGGAAGGAAAAGGACCTCGTCATGT  
 ACAGCAAGTGCCAGCGGCTCTCCGCTCTCCGTCCATGCCCTGCAGCGTGATCCGGCCCATCCTCAAGAG  
 GCTGGAGCGGCCCCAGGACAGGGACACGCCCGTGAGAATAAGCGGAGGCGGAGCGTGACCCCTCCTGAG  
 GAGCAGCAGGAGGCTGAGGAACCTAAAGCCCGCTCCTCCGCTCAAAATCACTGTGTACAGATGAGATCG  
 AGAACCTCCTGGACAGTGACCACCGAGAGCTGATTGGAGATTACTCTAAGGCCTTCTCTACAGACAGT  
 AGACGGAAAGCACCAAGACCTCAAGTACATCTCACCAGAAACGATGGTGGCCCTATTGACGGCAAGTTC  
 AGCAACATCGTGGATAAGTTTGTGATTGTAGACTGCAGATACCCCTATGAATATGAAGGCGGGCACATCA  
 AGACTGCGGTGAACCTGCCCCTGGAACCGGACGCGGAGAGCTTCTACTGAAGAGCCCCATCGCGCCCTG  
 TAGCCTGGACAAGAGAGTCACTCCTCATTTCCTACTGTGAATTCTCATCTGAGCGTGGGCCCGCATGTGC  
 CGTTTCATCAGGGAACGAGACCGTGCTGTCAACGACTACCCAGCCTCTACTACCCTGAGATGTATATCC  
 TGAAAGCGGCTACAAGGAGTCTTCCCTCAGCACCCGAACCTTGTGAACCCAGGACTACCGGCCAT  
 GAACCACGAGGCCTTCAAGGATGAGCTAAAGACCTTCCGCTCAAGACTCGCAGCTGGGCTGGGAGCGG  
 AGCCGGCGGGAGCTCTGTAGCCGGCTGCAGGACCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238590 representing NM\_001287517  
 Red=Cloning site Green=Tags(s)

MHSRSLTHLSRRASESSLSESSESDAGLCMDSPSPMDPHMAEQTFEQAIQAASRIIRNEQFAIRR  
 FQSMPVRLLGHSPVLRNITNSQAPDGRKSEAGSGAASSSGEDKENDGFVFKMPWKPTSPSTHALAEWA  
 SRREAFQRPSSAPDLMLCLSPDRKMEVEEL SPLALGRFSLTPAEGDTEEDDGFVDILESDLKDDDAVPPG  
 MESLISAPLVKTLKEEEEKDLVMYSKCQRLFRSPSPMPCSVIRPILKRLERPQDRDTPVQNKRRRSVTPPE  
 EQQEAEKPKARVLRKSLCHDEIENLLSDHRELIGDYSKAFLLQTVDGKHQDLKYISPETMVALLTGKF  
 SNIVDKFVIVDCRYPYEGGHKTAVNPLERDAESFLLKSPIAPCSLDRVILIFHCEFSSERGPRMC  
 RFIRERDRAVNDYPSLYPEMYILKGGYKEFFQHPNFCEPQDYRPMNHEAFKDELKTFRLKTRSWAGER  
 SRRELC SRLQDQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

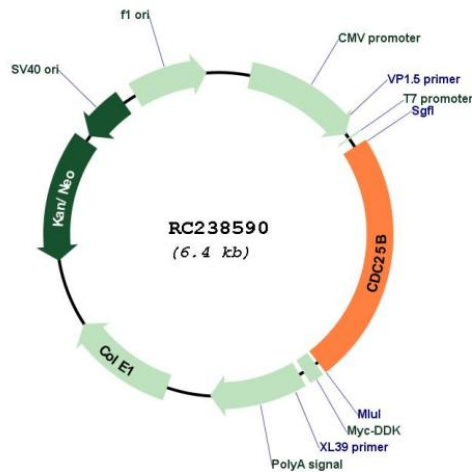
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001287517

ORF Size: 1506 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001287517.1, NP_001274446.1</u>
<b>RefSeq Size:</b>	3029 bp
<b>RefSeq ORF:</b>	1509 bp
<b>Locus ID:</b>	994
<b>Cytogenetics:</b>	20p13
<b>Protein Families:</b>	Druggable Genome, Phosphatase
<b>Protein Pathways:</b>	Cell cycle, MAPK signaling pathway, Progesterone-mediated oocyte maturation
<b>MW:</b>	57.8 kDa
<b>Gene Summary:</b>	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]