

## Product datasheet for **RC238523**

### **CDC25B (NM\_001287518) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CDC25B (NM_001287518) 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:**

>RC238523 representing NM\_001287518  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCACAGCGAAACCCAAAGAGTCAGGTAGGGACCTGCTCTCCGAGCCGACGCCCTGACGCACC  
 TATCCCTGTCTCGACGGGCATCCGAATCCTCCCTGCTGCTGAATCCTCGAATCTTCTGATGCAGGTCT  
 CTGCATGGATTCCCCAGCCCTATGGACCCACATGGCGGAGCAGACGTTTGAACAGGCCATCCAGGCA  
 GCCAGCCGGATATTCGAAACGAGCAGTTTGCATCAGACGCTTCCAGTCTATGCCGGTGGAGGCTGCTGG  
 GCCACAGCCCGTCTCGAACATCACCACCTCCAGGCGCCGACGGCCGGAGGAAGAGCGAGGCGGG  
 CAGTGGAGCTGCCAGCAGCTCTGGGAAGACAAGGAGAATGATGGATTTGTCTTCAAGATGCCATGGAAG  
 CCCACACATCCAGCTCCACCATGCTCTGGCAGAGTGGCCAGCCGACGGGAAGCCTTTGCCAGAGAC  
 CCAGCTCGGCCCCGACCTGATGTGTCTCAGTCTGACCGGAAGATGGAAGTGGAGGAGCTAGCCCCCT  
 GGCCCTAGGTCGTTCTCTCTGACCCCTGCAGAGGGGATACTGAGGAAGATGATGGATTTGTGGACATC  
 CTAGAGAGTGACTTAAAGGACCTCGTCATGTACAGCAAGTCCAGCGGCTCTCCGCTCTCCGTCCATGC  
 CCTGCAGCGTGATCCGGCCCATCCTCAAGAGGCTGGAGCGGCCCCAGGACAGGGACAGCCCGTGCAGAA  
 TAAGCGGAGGCGGAGCGTGACCCCTCCTGAGGAGCAGCAGGAGGCTGAGGAACCTAAAGCCCGCTCCTC  
 CGCTCAAATCACTGTGTACGATGAGATCGAGAACCTCCTGGACAGTGACCACCGAGAGCTGATTGGAG  
 ATTACTTAAGGCCTTCTCCTACAGACAGTAGACGAAAGCACCAGACCTCAAGTACATCTCACCAGA  
 AACGATGGTGGCCCTATTGACGGCAAGTTCAGCAACATCGTGGATAAGTTTGTGATTGTAGACTGCAGA  
 TACCCCTATGAATATGAAGGCGGCACATCAAGACTGCGGTGAACCTTCCCTGGAACCGCAGCCGAGA  
 GCTTCTACTGAAGAGCCCATCGCCCTGTAGCCTGGACAAGAGAGTATCCTCATTTCCACTGTGA  
 ATTCTCATCTGAGCGTGGGCCCGCATGTGCCGTTTCATCAGGGAACGAGACCGTGTCAACGACTAC  
 CCCAGCCTCTACTACCCTGAGATGTATCCTGAAAGGCGGCTACAAGGATTTCTCCCTCAGCACCCGA  
 ACTTCTGTGAACCCAGGACTACCGGCCATGAACCACGAGGCCTTCAAGGATGAGCTAAAGACCTTCCG  
 CCTCAAGACTCGCAGCTGGGCTGGGAGCGGAGCCGGCGGAGCTCTGTAGCCGCTGCAGGACCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238523 representing NM\_001287518  
 Red=Cloning site Green=Tags(s)

MHSETPKSQVGTLLFRSRSLTHLSLRRASESSLSESSSESSDAGLCMDSPSPMDPHMAEQTFEQAIQA  
 ASRIIRNEQFAIRRFQSMQVRLGHSPVLRNITNSQAPDGRKSEAGSGAASSSGEDKENDGFVFKMPWK  
 PTHPSSTHALAEWASRREAFARQPSAPDLMCLSPDRKMEVEELSPLALGRFSLTPAEGDTEEDDGFVDI  
 LESDLKDLVMYSKCQRLFRSPSPMPCSVIRPILKRLERPQDRDTPVQNKRRRSVTPPEEQEAEPEKARVL  
 RSKSLCHDEIENLLSDHRELIGDYSAFLLQTVDGKHQDLKYISPETMVALLTGKFSNIVDKFVI VDCR  
 YPYEYEGGHIKTAVNLP LERDAESFLLKSPIAPCSLDKRVILIFHCEFSSERGPRMCRFIRERDRAVNDY  
 PSLYYPEMYILKGGYKEFFPQHPNFCEPQDYRPMNHEAFKDELKTFRLKTRSWAGERSRRELCSRLQDQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

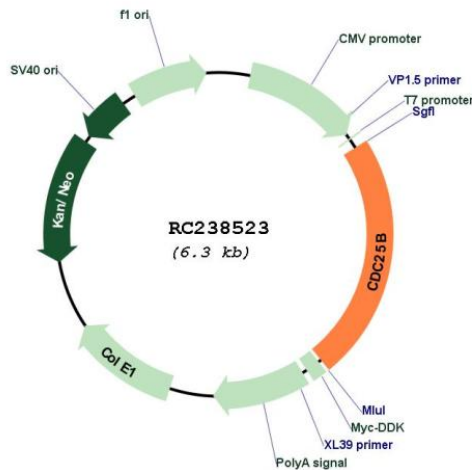
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001287518

ORF Size: 1467 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_001287518.1, NP_001274447.1</u>
<b>RefSeq Size:</b>	2990 bp
<b>RefSeq ORF:</b>	1470 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>	56.4 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]