

Product datasheet for **RG238403**

CDC25B (NM_001287520) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC25B (NM_001287520) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDC25B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238403 representing NM_001287520. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
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TTCAAGGATGAGCTAAAGACCTCCGCCTCAAGACTCGCAGCTGGGCTGGGAGCGGAGCCGGCGGGAG
CTCTGTAGCCGGCTGCAGGACCAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG238403
 Blue=ORF Red=Cloning site Green=Tag(s)

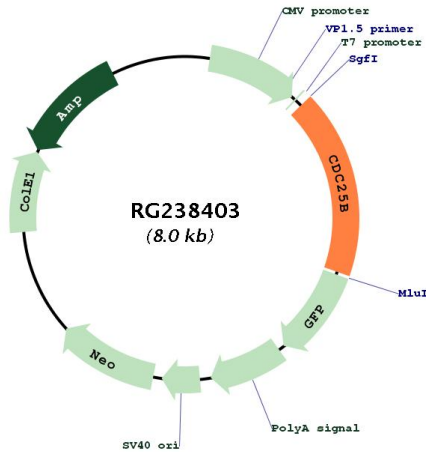
MDSPSPMDPHMAEQTFEQAIQAASRIIRNEQFAIRRFQSMVRLLGHSPVLRNITNSQAPDGRKSEAG
 SGAASSSGEDKENDGFVFKMPWKPTHPSSTHALAEWASRREAFQRPSSAPDLMCLSPDRKMEVEELSP
 LALGRFSLTPAEGDTEDDGFVDILESDLKDDAVPPGMEISAPLVKLEKEEEKDLVMYSKCQRLF
 RSPSPMPCSVIRPILKRLERPQDRDTPVQNKRRRSVTPPEEQEAEPEKARVLRKSLCHDEIENLLDSD
 HRELIGDYSKAFLLQTVDGKHQDLKYISPETMVALLTGKFSNIVDKFVIIDCRYPYEYEGGHIKTAVNL
 PLERDAESFLLKSPIAPCSLDRVILIFHCFSSERGP R MCRFIRERDRAVNDYPSLYPEMYILKGGY
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 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001287520

ORF Size: 1404 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).

RefSeq: [NM_001287520.1](#), [NP_001274449.1](#)

RefSeq Size: 2844 bp

RefSeq ORF: 1407 bp

Locus ID: 994

Cytogenetics: 20p13

Protein Families: Druggable Genome, Phosphatase

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

MW: 54.2 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]