

Product datasheet for **RG207409**

CDC25B (NM_021873) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC25B (NM_021873) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDC25B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG207409 representing NM_021873
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGTGCCCCAGCCGGAGCCCGCGCCAGGCTCGGCTCTCAGTCCAGCAGGCGTGTGCGGTGGCGCCC
 AGCGTCCGGGCCACCTCCCGGGCTCCTGCTGGGATCTCATGGCCTCCTGGGGTCCCGGTGCGGGCGGC
 CGTTCCTCGCCGGTCAACCACCTCACCCAGACCATGCACGACCTCGCCGGGCTCGGCAGCGAAACCCCA
 AAGAGTCAGGTAGGGACCTGCTCTTCCGACGCCGAGCCGCTGACGCACCTATCCCTGTCTCGACGGG
 CATCCGAATCCTCCCTGCTGCTGAATCCTCCGAATCTTCTGATGCAGGTCTCTGCATGGATTCCCCAG
 CCCTATGGACCCACATGGCGGAGCAGACGTTTGAACAGGCCATCCAGGCAGCCAGCCGGATCATTGCA
 AACGAGCAGTTTGCATCAGACGCTTCCAGTCTATGCCGGTGGGCTGCTGGGCCACAGCCCGTGTCTC
 GGAACATCACCACTCCAGGCGCCGACGGCCGAGGAAGAGCGAGGCGGGCAGTGGAGCTGCCAGCAG
 CTCTGGGAAGACAAGGAGAATGATGGATTTGTCTTCAAGATGCCATGGAAGCCACACATCCAGCTCC
 ACCCATGCTCTGGCAGAGTGGGCCAGCCGAGGAAGCCTTTGCCAGAGACCCAGCTCGGCCCCCGACC
 TGATGTGTCTCAGTCTGACCGGAAGATGGAAGTGGAGGAGCTCAGCCCCCTGGCCCTAGGTCGTTCTC
 TCTGACCCTGCAGAGGGGGATACTGAGGAAGATGATGGATTTGTGGACATCCTAGAGAGTGACTTAAAG
 GATGATGATGCAGTTCCTCCAGGCATGGAGAGTCTCATTAGTGCCCCACTGGTCAAGACCTTGGAAAAGG
 AAGAGGAAAAGGACCTCGTCATGTACAGCAAGTCCAGCGGCTCTTCCGCTCTCCGTCCATGCCCTGCAG
 CGTGATCCGGCCATCCTCAAGAGGCTGGAGCGGCCCCAGGACAGGGACACGCCCGTGCAGAATAAGCGG
 AGGCGGAGCGTGACCCCTCCTGAGGAGCAGCAGGAGGCTGAGGAACCTAAAGCCCGCTCCTCCGCTCAA
 AATCAGTGTGTACGATGAGATCGAGAACCTCCTGGACAGTACCACCGAGAGCTGATTGGAGATTACTC
 TAAGGCCTTCTCCTACAGACAGTAGACGGAAAGCACCAAGACCTCAAGTACATCTCACCAGAAAAGATG
 GTGCCCTATTGACGGGCAAGTTCAGCAACATCGTGGATAAGTTTGTGATTGTAGACTGCAGATACCCCT
 ATGAATATGAAGGCGGGCACATCAAGACTGCGGTGAACCTGCCCCGGAACGCGACGCCGAGAGTTCCT
 ACTGAAGAGCCCCATCGCGCCCTGTAGCCTGGACAAGAGAGTCACTCCTCATTTCCTACTGTGAATTCTCA
 TCTGAGCGTGGGCCCGCATGTGCCGTTTTCATCAGGGAACGAGACCGTGTCAACGACTACCCAGCC
 TCTACTACCTGAGATGTATCCTGAAAGGCGGCTACAAGGAGTCTTCCCTCAGCACCCGAACCTCTG
 TGAACCCAGGACTACCGCCCATGAACCACGAGGCTTCAAGGATGAGCTAAAGACCTTCCGCTCAAG
 ACTCGCAGCTGGGCTGGGAGCGGAGCCGCGGGAGCTCTGTAGCCGGCTGCAGGACCAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG207409 representing NM_021873
 Red=Cloning site Green=Tags(s)

MEVPQPEPAPGSALSPAGVCGGAQRPGLPGLLLGSHGLLGSPVRAAASSPVTTLTQTMHDLAGLGSETP
 KSQVGTLLFRSRSLTHLSLRRASESSLSESSSSDAGLCMDSPSPMDPHMAEQTFEQAIQAASRIIR
 NEQFAIRRFQSMVRLRHSPVLRNITNSQAPDGRKSEAGSGAASSSGEDKENDGFVFKMPWKPTHSS
 THALAEWASRREAFQRPSSAPDLMCLSPDRKMEVEEL SPLALGRFSLTPAEGDTEEDDGFVDILESDLK
 DDDAVPPGMESLISAPLVKTLKKEEEKDLVMYSKQRLFRSPSPMPCSVIRPILKRLERPQDRDTPVQNKR
 RRSVTPPEEQEAEEPKARVLRKSLCHDEIENLLDSDHRELIGDYSKAFLLQTVDGKHQDLKYISPETM
 VALLTGKFSNIVDKFVIDCRYPYEEYEGGHKTAVNLPLERDAESFLKSPIAPCSLDRVILIFHCEFS
 SERGPRMCRFIRERDRAVNDYPSLYPEMYILKGGYKEFFPQHPNFCQPQDYRPMNHEAFKDELKTFRLK
 TRSWAGERSRRELCSRLQDQ

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_021873

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: [NM_021873.3](#)

RefSeq Size: 3701 bp

RefSeq ORF: 1743 bp

Locus ID: 994

UniProt ID: [P30305](#)

Cytogenetics: 20p13

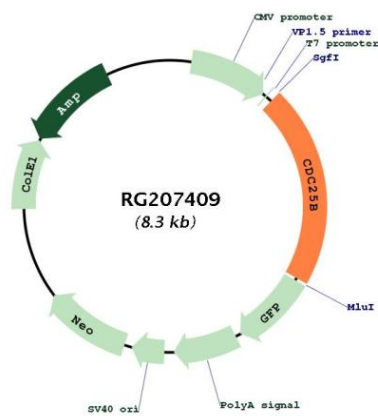
Domains: RHOD

Protein Families: Druggable Genome, Phosphatase

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

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 RG207409