

Product datasheet for MR202861

Cdc34 (NM_177613) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdc34 (NM_177613) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdc34
Synonyms:	A1327276; E2-CDC34; UBE2R1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202861 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCCGGCGCTGGTGCCAAGCTCGCAGAAGGCGCTGCTGCTGGAAGTGAAGGGGCTGCAGGAGGAGC
CGGTGGAGGGCTTCCGGGTGACGCTGGTGGACGAGGGTGACCTGTACAAGTGGGAGGTGGCCATCTTCGG
GCCCCAACACCTACTATGAGGGCGGCTACTTCAAGGCTCGCCTCAAGTCCCCATCGACTACCCGAT
TCCCCACCAGCCTTCCGGTTCCTACCAAGATGTGGCACCCAAACATCTATGAGACAGGGGACGTGTGCA
TCTCCATTCTCCATCCCCAGTTGACGACCCACAGAGTGGGAGCTGCCCTCAGAGCGGTGAACCCAC
ACAGAATGTCAGAACCATCCTCCTGAGTGTAAATTCGCTGCTGAATGAGCCCAACACCTTCTCGCCTGCC
AACGTGGACGCTCGGTGATGTACAGAAAATGGAAGGAGAGCAAGGGGAAGGACCGCGAGTACACGGACA
TCATCCGGAAGCAGGTCTTGGGACCAAGGTGGACGCGGAGCGGATGGTGTGAAGGTGCCACTACGCT
GGCCGAGTACTGCGTGAAGACCAAGGCGCCGCGCCGACGAGGGCTCGGACCTTTCTACGACGACTAC
TATGAGGACGGCGAAGTGGAGGAGCCGACAGCTGCTTTGGGATGAAGAGGATGACTCTGGCACCGAAG
AGTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR202861 protein sequence
 Red=Cloning site Green=Tags(s)

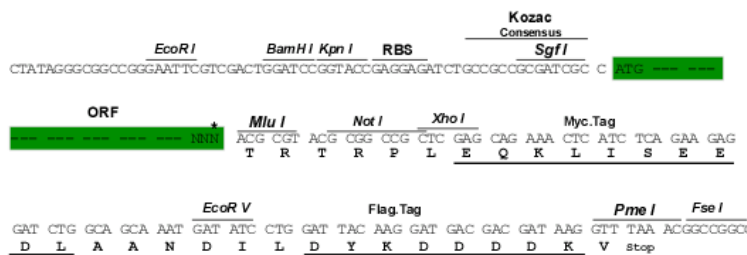
MARPLVPSSQKALLLELKGLEEEPVEGFRVTLVDEGDLYNWEVAIFGPPNTYYEGGYFKARLKFPIDYPY
 SPPAFRFLTKMWHPNIIYETGDVCISILHPPVDDPQSGELPSEWRNPTQNVRTILLSVISLLNEPNTFSPA
 NVDASVMYRKWKESKGDREYTDIIRKQVLGTKVDAERDGVKVP TTLAEYCVKTKAPAPDEGSDLFYDDY
 YEDGEVEEADSCFGDEEDDSGTEES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_177613

ORF Size: 708 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_177613.2](#), [NP_808281.1](#)

RefSeq Size: 1295 bp

RefSeq ORF: 708 bp

Locus ID: 216150

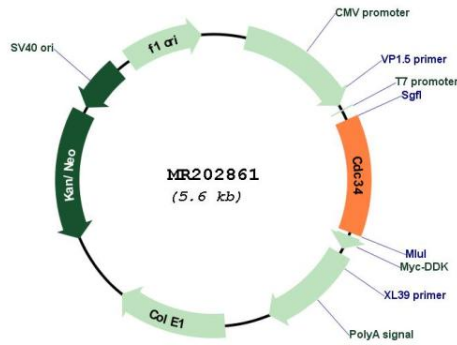
UniProt ID: [Q8CFI2](#)

Cytogenetics: 10 39.72 cM

MW: 26.6 kDa

Gene Summary: Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys-48'-linked polyubiquitination. Cooperates with the E2 UBCH5C and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation. Performs ubiquitin chain elongation building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. UBE2D3 acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin. Cooperates with the SCF(SKP2) E3 ligase complex to regulate cell proliferation through ubiquitination and degradation of MYBL2 and KIP1. Involved in ubiquitin conjugation and degradation of CREM isoform ICERIIgamma and ATF15 resulting in abrogation of ICERIIgamma- and ATF5-mediated repression of cAMP-induced transcription during both meiotic and mitotic cell cycles. Involved in the regulation of the cell cycle G2/M phase through its targeting of the WEE1 kinase for ubiquitination and degradation. Also involved in the degradation of beta-catenin.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202861