

Product datasheet for **RC206935**

Cullin 4B (CUL4B) (NM_003588) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cullin 4B (CUL4B) (NM_003588) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CUL4B
Synonyms:	CUL-4B; MRXHF2; MRXS15; MRXSC; SFM2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide
Sequence:**

>RC206935 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGTCACAGTCATCTGGATCAGGAGATGGGAATGATGATGAGGCTACTACCTCTAAAGACGGTGGTT
 TTTCTTCCCCAGTCCCTCAGCTGCTGCTGCTCAGGAGGTCAGATCTGCCACTGATGGTAATACCAG
 CACCACCTCGCCACCTCTGCCAAGAAGAGAAAGTTAAACAGCAGCAGCAGTAGCAGCAGTAACAGTAGT
 AACGAGAGAGAAGACTTTGATTCCACCTCTTCTCCTCTTCCACTCCTCCTTTACAACCCAGGGATTTCGG
 CATCCCCTTCAACCTCGTCCTTCTGCCTGGGGTTTCAGTGGCTGCTTCCAGCCACGTACCGATACAGAA
 GAAGCTGCGTTTTGAAGACACCTGGAGTTGTAGGGTTTGATGCGAAGATGGCTGAGGAATCCTCCTCC
 TCCTCCTCCTCATCTTACCAACTGCTGCAACATCTCAGCAGCAGCAACTAAAAATAAGAGTATATTTAA
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 AGTACAATTTAGAAGAACTCTACCAGGCTGTAGAAAATCTCTGTTCTTACAAGATTTCTGCAAACTTGTA
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 GGAGCATTTTTTTGTTTCTGGATAGAAGTTACGTTCTTTCAGAATTCATGCTACCTCCATTTGGGACAT
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 AGAGTATTTCAAGACAGACAGTATCAAATTTGATGCTGCAATTTGTCGAATTATGAAGATGAGAAAGACAC
 TTAGCCACAATCTCCTTGTTCAGAAAGTGTACAACAGTTGAAATTTCCAGTAAAGCCTGCTGATCTTAA
 GAAGAGAATAGAATCTTTAATTGACCGGACTACATGAAAGAGATAAAGAAAATCCAAACCAAGTACAAC
 TATATTGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RC206935 protein sequence
 Red=Cloning site Green=Tags(s)

MMSQSSGSGDGNDEATTSKDGGFSSPSPSAAAAAQEVRSATDGNTSTTPPTSAKKRKLNSSSSSSSSNSS
 NEREDFDSTSSSSSTPPLQPRDSASPSTSSFCLGVSVAASSHVP IQKLR FEDTLEFVGFDAKMAEESS
 SSSSSSPTAATSQQQLKNKSILISSVASVHANGLA KSSSTTVSSFANSKPGSAKKLVIKNFKDKPKLPE
 NYTDETWQKLKEAVEAIQNSTSIKYNLEELYQAVENLCSYKISANLYKQLRQICEDHIKAQIHQFREDSL
 DSVLFLKKIDRCWQNHCRQMIMIRSIFLFLDRTYVYLQNSMLPSIWMGLEL FRAHII SDQKVQNKTI DGI
 LLLIERERNGEAI DRSLLRSLLSMLSDLQIYQDSFEQRFLEETNRLYAAEGQKLMQEREVPEYLHVNKR
 LEEEADRLITYLDQTTQKSLIATVEKQLLGEHLTAILQKGLNNLLDENRIQDLSLLYQLFSRVRGVQVVL
 LQQWIEYIKAFGSTIVINPEKDKTMVQELLDFKDKVDHIIDICFLKNEKF INAMKEAFETFINKRPNKPA
 ELIAKYVDSKLRAGNKEATDEELEKMLDKIMIIFRFIYGKDVFEAFYKDKLAKRLLVGKSASVDAEKSML
 SKLKHECGAFTSKLEGMFKDMELSKDIMIQFKQYMQNQNVPGNIELTVNILTMGYWPTYVPMEVHLPE
 MVKLQEIFKTFYLGKHSGRKLQWQSTIGHCVLKAEFKEGKELQVSLFQTLVLLMFNEGEEFSL EEEKQA
 TGIEDGELRRTLQSLACGKARVLAKNPKGKDIEDGDKFICNDDFKHKLFRIKINQIQMKETVEEQASTTE
 RVFQDRQYQIDAAIVRIMKMRKTL SHNLLVSEVYNQLKFPVKPADLKKRIESLIDRDYMERDKENPNQYN
 YIA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6229_c12.zip

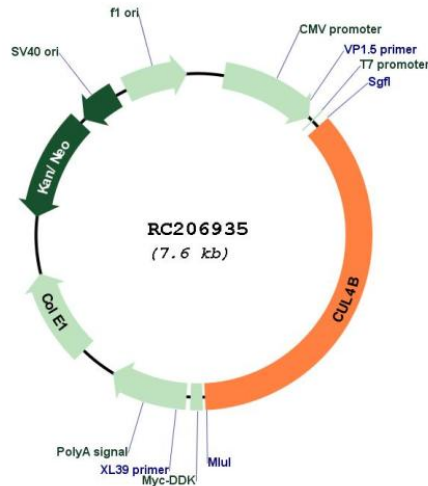
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_003588

ORF Size: 2739 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_003588.2](#), [NP_003579.2](#)

RefSeq Size: 5365 bp

RefSeq ORF: 2742 bp

Locus ID: 8450

UniProt ID: [Q13620](#)

Cytogenetics: Xq24

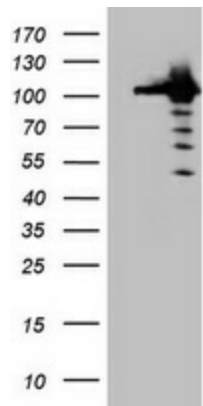
Domains: CULLIN

Protein Pathways: Nucleotide excision repair, Ubiquitin mediated proteolysis

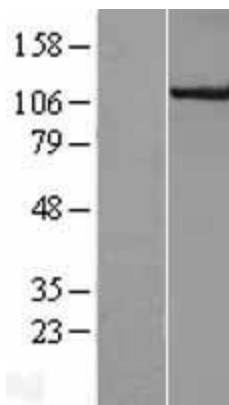
MW: 104 kDa

Gene Summary: This gene is a member of the cullin family. The encoded protein forms a complex that functions as an E3 ubiquitin ligase and catalyzes the polyubiquitination of specific protein substrates in the cell. The protein interacts with a ring finger protein, and is required for the proteolysis of several regulators of DNA replication including chromatin licensing and DNA replication factor 1 and cyclin E. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

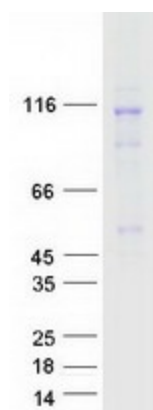
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CUL4B (Cat# RC206935, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CUL4B(Cat# [TA800444]). Positive lysates [LY418558] (100ug) and [LC418558] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418558]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206935 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CUL4B protein (Cat# [TP306935]). The protein was produced from HEK293T cells transfected with CUL4B cDNA clone (Cat# RC206935) using MegaTran 2.0 (Cat# [TT210002]).