

Product datasheet for **MR215691**

Cul2 (NM_029402) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Cul2 (NM_029402) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Cul2 |
| Synonyms: | 1300003D18Rik; 4932411N15Rik; AI327301; mKIAA4106 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>MR215691 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCSTTTAAAACCAAGAGTAGTGGATTTTGTAGACATGGAACAAACTCCTAACTACAATCAAAGCTG
 TTGTTATGTTGGAATATGTCGAGCGAGCAACATGGAATGACCGCTTCTCAGATATCTATGCTTTATGTGT
 GGCTATCCTGAACCACTTGGAGAAAGACTTTATGCGGAAACAAAGATTTTTTTGGAAAAGTCACGTTTCGG
 CATTGTATAAGAGAGTTCTGGAGTCTGAAGAACAAGTCTTGTATGTATCATAGGTAAGTGGGAAGAAT
 ACAGCAAAGGCGCCGACTATATGGACTGCTTATATAGGTATCTCAATACCCAGTATATAAAAAGAATAA
 ATTGACAGAAGCTGATATACAGTATGGCTATGGTGGAGTAGATATGAATGAACCACTTATGGAAATAGGA
 GAGCTAGCATTGGATATGTGGAGGAAGTAAATGGTTGAACCCCTCAGAACATCCTCATCCGGATGCTGC
 TTCGAGAAATTAATAATGATCGTGGTGGTGAAGATCCAAACCAGAAAGTAAATCCATGGGGTTATTAACTC
 CTTTGTTCATGTTGAACAGTATAAGAAAAATTTCCCTTAAAGTTTTATCAGGGAATATTCGTGTCTCCC
 TTTCTGACTGAAACGGGAGAATATTACAAGCAAGAAGCTTCAAATTTATTACAAGAAATCAAATGTTTCAC
 AGTATATGGAAAAGGTTCTAGGTAGATTAAGAAATGAAGAAATAGATGTCGAAAATATTTGCATCCAAG
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 AACAAATTCATCAGAAACCAAGACACCGTGATTGACTTGGGGATTAGTTTCCAAATATATGTTCTTCAGG
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 AATGTATCTTCAAGCTGCTATTGTCCGCATCATGAAAGCACGAAAAGTGTTCGGCACAAACGCCCTCATT
 CAAGAGGTAATCAGCCAGTCAAGAGCCAGGTTCAATCCCAGTATCAGCATGATTAAGAAGTGCATAGAAG
 TTCTGATAGACAAACAGTACATCGAGCGCAGCCAAGCATCTGCAGATGAATACAGTTACGTCGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATTAAGTTTAA

Protein Sequence: >MR215691 protein sequence
Red=Cloning site Green=Tags(s)

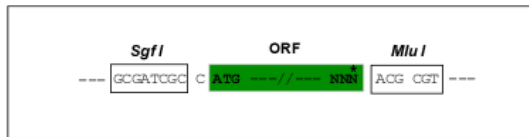
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MSLKPRVVDVDFETWNKLLTTIKAVVMLEYVERATWDRFSDIYALCVAYPEPLGERLYAETKIFLESHVR
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ELALDMWRKLMVEPLQNILIRMLLREIKNDRGGEDPNQKVIHGVINSFVHVEQYKKKFKPLKFYQGIFVSP
FLTETGEYKQAEASNLLQESNCSQYMEKVLGRLKDEEIRCRKYLHPSSYTKVIHECQQRMVADHLQFLHS
ECHSIIQQRKNDMANMYVLLRAVSSGLPHMIEELQKHIHDEGLRATSNLTQEHMPTLFVESVLEVHGKF
VQLINTVLNGDQHFMSALDKALTSVVNYREPKSVCKAPELLAKYCDNLLKKSAGMTENEVEDKLTSFIT
VFKYIDDKDVFQKFYARMLAKRLIHGLSMSMDSEEAMINKLKQACGYEFTSKLHRMYTDMVSADLNKFK
NNFIRNQDVTIDLGISFQIYVLQAGAWPLTQAPSSTFAIPQELEKSVQMFELFYSQHFSGRKLTLWHLK
TGEVKMNYLGKPYVAMVTTYQMAVLLAFNNSETVSYKELQDSTQMNEKELTKTIKSLLDVKMINHDSEKE
DIDAESSFSLNMSFSSKRTKFKITTSMQKDTPQELEQTRSAVDEDRKMYLQAAIVRIMKARKVLRHNALI
QEVISQSRARFNPSISMIKKCIEVLIDKQYIERSQASADEYSYVA
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_029402

ORF Size: 2235 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_029402.3](#), [NP_083678.2](#)

RefSeq Size: 4158 bp

RefSeq ORF: 2238 bp

Locus ID: 71745

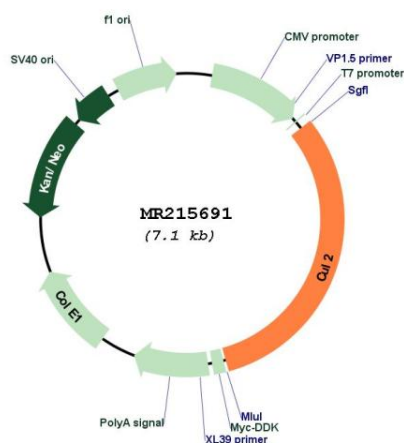
UniProt ID: [Q9D4H8](#)

Cytogenetics: 18 A1

MW: 86.9 kDa

Gene Summary: Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins. ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (By similarity). May serve as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. The E3 ubiquitin-protein ligase activity of the complex is dependent on the neddylation of the cullin subunit and is inhibited by the association of the deneddylated cullin subunit with TIP120A/CAND1 (By similarity). The functional specificity of the ECS complex depends on the substrate recognition component. ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR215691