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Product datasheet for MC201524

Cul3 (NM_016716) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cul3 (NM_016716) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cul3
Synonyms:	KIAA0617
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

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>BC027304 sequence for NM_016716
CGGACGCGTGGGCGGACGCGTGGGCGCCGCCCCCCGCCGAGCCCCGCGGCTGCCCTCCCGCCTTCAATGT
GACACCGGCGCCTCCGAGTGCGAGCCGCAGCCGCCGCCGCCGTCAGCGCCGCCGCCGGGGAGGGGCCGAG
CACCATGTCGAATCTGAGCAAAGGCACGGGCAGCCGGAAGGACACCAAGATGCGGATCCGGGCCTTTCCG
ATGACCATGGATGAAAAATATGTAAACAGCATTTGGGACCTTCTGAAAAATGCAATTCAAGAAATCCAGC
GTAAGAATAACAGTGGTCTTAGTTTTGAGGAGCTCTATAGAAATGCATATACAATGGTTTTGCATAAACA
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TGGTGATGATTAGAGACATATTAATGTATATGGACCGTGTATATGTACAACAGAATAATGTAGAAAATGT
CTACAATTTGGGATTAATAATTTTTCGAGATCAAGTTGTACGGTATGGGTGTATTAGGGATCATCTTCGG
CAAACTTTATTGGATATGATTGCCAGAGAGCGGAAAGGAGAAGTTGTAGACAGAGGAGCAATAAGAAATG
CTTGCCAGATGTTAATGATTTTAGGTCTTGAAGGAAGATCAGTCTATGAGGAAGATTTTGAGGCTCCGTT
TTTGGAAATGTCTGCAGAATTTTTTCAGATGGAAAGCCAGAAATTTTTAGCAGAAAACAGTGCTTCAGTA
TATATAAAGAAAGTAGAAGCTAGGATTAATGAGGAAATAGAGCGGGTGATGCACTGCCTTGACAAATCCA
CAGAAGAGCCTATTGTGAAGGTGGTGGAGAGGGAACTCATTTCCAAGCACATGAAGACTATTGTAGAAAT
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ACATCTACAGGCAACGGGGGTCTCTTTAGGTGGTGTTGATCTCACAGTCCGGGTTCTCACAACGGGATAT
TGGCCTACTCAGTCAGCCACACCAAAGTGCAACATCCCACCAGCACCAAGACATGCTTTTGAGATATTTA
GAAGGTTCTACTTAGCCAAACACAGTGGTCGACAGCTCACACTCCAGCATCACATGGGTTCTGCAGATCT
CAATGCCACCTTTTATGGTCCAGTTAAAAAGGAAGATGGATCTGAGGTTGGTGTTGGCGGTGCACAAGTA
ACTGGTTCTAATACACGGAAGCACATACTTCAAGTCTCCACTTTCCAGATGACCATATTAATGCTTTTTA
ATAATAGAGAGAAGTACACATTTGAGGAAATTCAACAAGAGACAGATATCCCTGAAAGAGAACTTGTTAG
AGCCCTCCAGTCCCTCGCCTGTGGTAAACCAACACAGCGGGTCCTCACAAAAGAACCCAAGTCCAAGGAG
ATAGAAAGTGGCCACATATTTACAGTTAATGATCAATTCACATCTAAACTACACAGAGTCAAGATTCAAA
CAGTTGCAGCCAAACAAGGTGAATCCGACCCAGAAAGGAAAGAAACAAGACAGAAAGTAGATGATGACAG
AAAACATGAGATAGAAGCTGCTATAGTGCGAATAATGAAGTCTAGGAAGAAGATGCAGCACAATGTTTTA
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AAGGACTTATTGAGAGAGAATATTTGGCACGAACACCTGAGGATCGCAAAGTATACACATATGTAGCATA
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ATACTATTAAGACGACCATCTCTTCTGTTAAATTGCAGTACGTGTTATAGACCACTCAGATCAAGCCTCT
ACTCCCTCTGAGAGTTTTCAACATCAGTTGATTGAGCTTCAGGCTTTCCAACGTTATCCCTGTAGAGATC
ATCTTTACAGTTCCTCGGGAAAATGTGAATGTGCCGCGTTTTGTTTTCAATATTGTATGAAAACAGGAAA
AAAATAAAACAAATTTAGAAAACACAGCTCATTAAAATAAAATTGTTGGATTTCATTTCAAAAAAAAAAA  AAAA
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Restriction Sites: RsrII-NotI

ACCN: NM_016716

Insert Size: 2307 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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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:	BC027304, AAH27304
RefSeq Size:	2804 bp
RefSeq ORF:	2307 bp
Locus ID:	26554
UniProt ID:	Q9JLV5
Cytogenetics:	1 C5
Gene Summary:	Core component of multiple cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins (By similarity). BCR complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (By similarity). As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (By similarity). 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 BCR complex depends on the BTB domain-containing protein as the substrate recognition component (By similarity). BCR(KLHL42) is involved in ubiquitination of KATNA1 (By similarity). BCR(SPOP) is involved in ubiquitination of BMI1/PCGF4, BRMS1, H2AFY and DAXX, GLI2 and GLI3 (By similarity). Can also form a cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex containing homodimeric SPOPL or the heterodimer formed by SPOP and SPOPL; these complexes have lower ubiquitin ligase activity (By similarity). BCR(KLHL9-KLHL13) controls the dynamic behavior of AURKB on mitotic chromosomes and thereby coordinates faithful mitotic progression and completion of cytokinesis (By similarity). BCR(KLHL12) is involved in ER-Golgi transport by regulating the size of COPII coats, thereby playing a key role in collagen export, which is required for embryonic stem (ES) cells division: BCR(KLHL12) acts by mediating monoubiquitination of SEC31 (SEC31A or SEC31B) (PubMed:22358839). BCR(KLHL3) acts as a regulator of ion transport in the distal nephron; by mediating ubiquitination of WNK4 (By similarity). The BCR(KLHL20) E3 ubiquitin ligase complex is involved in interferon response and anterograde Golgi to endosome transport: it mediates both ubiquitination leading to degradation and 'Lys-33'-linked ubiquitination (By similarity). The BCR(KLHL21) E3 ubiquitin ligase complex regulates localization of the chromosomal passenger complex (CPC) from chromosomes to the spindle midzone in anaphase and mediates the ubiquitination of AURKB (By similarity). The BCR(KLHL22)

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ubiquitin ligase complex mediates monoubiquitination of PLK1, leading to PLK1 dissociation from phosphoreceptor proteins and subsequent removal from kinetochores, allowing silencing of the spindle assembly checkpoint (SAC) and chromosome segregation. The BCR(KLHL22) ubiquitin ligase complex is also responsible for the amino acid-stimulated 'Lys-48' polyubiquitination and proteasomal degradation of DEPDC5. Through the degradation of DEPDC5, releases the GATOR1 complex-mediated inhibition of the TORC1 pathway (By similarity). The BCR(KLHL25) ubiquitin ligase complex is involved in translational homeostasis by mediating ubiquitination and subsequent degradation of hypophosphorylated EIF4EBP1 (4E-BP1) (By similarity). The BCR(KBTBD8) complex acts by mediating monoubiquitination of NOLC1 and TCOF1, leading to remodel the translational program of differentiating cells in favor of neural crest specification (By similarity). Involved in ubiquitination of cyclin E and of cyclin D1 (in vitro) thus involved in regulation of G1/S transition (By similarity). Involved in the ubiquitination of KEAP1, ENC1 and KLHL41 (By similarity). In concert with ATF2 and RBX1, promotes degradation of KAT5 thereby attenuating its ability to acetylate and activate ATM (By similarity). The BCR(KCTD17) E3 ubiquitin ligase complex mediates ubiquitination and degradation of TCHP, a down-regulator of cilium assembly, thereby inducing ciliogenesis (By similarity). The BCR(KLHL24) E3 ubiquitin ligase complex mediates ubiquitination of KRT14, controls KRT14 levels during keratinocytes differentiation, and is essential for skin integrity (By similarity).[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (1) represents the shorter transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.

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