

Product datasheet for **SC117870**

Cullin 3 (CUL3) (NM_003590) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cullin 3 (CUL3) (NM_003590) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cullin 3
Synonyms:	CUL-3; NEDAUS; PHA2E
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC117870 sequence for NM_003590 edited (data generated by NextGen Sequencing)

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ATGTCGAATCTGAGCAAAGGCACGGGCAGCCGGAAGGACACCAAGATGCGGATCCGGGCC
TTTCCGATGACCATGGATGAAAAATATGTAACAGCATTGGGACCTTCTGAAAAATGCA
ATTCAAGAAATCCAGCGTAAGAATAACAGTGGTCTTAGTTTTGAGGAGCTCTATAGAAAT
GCATATACAATGGTTTTGCATAAACATGGAGAAAAGCTCTACACTGGACTAAGAGAAGTT
GTTACCGAACATCTCATAAATAAGGTGCGAGAAGATGTACTAAATTCATTGAATAACAAC
TTTCTTCAAACGCTAAATCAAGCTTGAATGATCATCAAACAGCTATGGTGATGATTAGA
GACATACTAATGTACATGGACCGTGTGTATGTACAACAAAATAATGTGGAGAACGCTAC
AATTTGGGATTAATTATTTTTCGAGATCAAGTTGTACGTATGGGTGATTAGGGATCAT
CTACGGCAAACCTCTATTGGATATGATTGCAAGAGAGCGGAAAGGAGAAGTCGTAGACAGA
GGCGCAATAAGAAATGCTTGCCAGATGTTAATGATTTTAGGTCTCGAAGGAAGATCAGTC
TATGAAGAAGATTTTGGGCTCCTTTTTGGAAATGTCTGCAGAATTTTTTCAGATGGAA
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TATATCCAGGGCTTATTGGATCTGAAGAGTAGGTTTCGATCGCTTCTCCTCGGAATCATT
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GATATCCCTGAAAGAGAGCTTGTAGAGCCCTACAGTCCCTCGCCTGTGGTAAACCAACA
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CAAGGTGAATCCGACCCAGAGAGGAAAGAAACAAGGCAGAAAGTAGACGACGACAGAAAA
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ATTAAGAAACGATTGAAGGACTTATTGAGAGAGAATATTTGGCACGAACACCTGAGGAT
CGCAAAGTATACATATGTAGCATAA

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Clone variation with respect to NM_003590.3
 1367 c=>t;1581 a=>t;1992 a=>g

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003590 unedited
 GCACGAGGCGGAGGAGGAGAATGAGGAGGAGGAGGACGACGTTCCGGCCTGCGCAGTGAGA
 TGTTTTGTCCTGCGCCGCCGCCGCCATCGCGGAGGAGCGCGATAAAGGGAGCCGAGCC
 GGACGTGAGGGGGACCCCGCGGAGCCCGCGCCAGCGCAGCCCCCAGCCGCATCGGAG
 TCGCCAGAGTCCGAGCCGTCGTCGCCGCCGCCGCCGCCGCGCGCTCGCGGCTGCCATGGGC
 CGGCCAGCTCCCCAGCCCTGCCCGGGGTGCGCGCCGCCGCCGCCGCCAGCGTCCGCCCTA
 GCCTGCCTGCCCGCCTTAAATGTGACACCGCGCTTGCAGGAGCGGACCTGTAGCCGCCGC
 CGGGGAGGGGACTAGCACCATGTGCAATCTGAGCATAGGCACGGGCATCCGGAAGGACAC
 CAAGATGCAGATCCGGGCCTTTTCGATGACCATGGATGAAAAATATGTAACAGCATTTG
 GGACCTTCTGAAAAATGCAATCAAGAAATCCAGCGTAATAATAACAGTGGTCTTAGTTC
 TGAGGAGCTCTATAGAAATGCATATACAATGGTTTTGCATAAACATGGAGAAAAGCTCTA
 CACTGGA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003590 unedited
 ACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGAATCCACAATTTTAT
 TGTAATGAGCTGTATTTTCTAAATTTCTTTTTATTTTCTGTTTTTCATACAGTAAAGAA
 AACAAAACGCAGCACATTCACATTTCCCGAGGAACTGTAAGATGATCTCTACAGGGAT
 AAACGTTGTAAAGCCTGAAGCTCAACTCACTGATGTTGGAACTCTCAAAGGGAGTAAAG
 GCTTGATCTCAATGGTCTAGAACATGACTGTAATTTAATAAGAAGATGGTCGTCTTAA
 TATTTAATGATTTAAAAGAACTCCAGTCCATGCGAAGAGTACAGTCCAAGAATAAATC
 AAATTTCTGAACGCATTTTATGCTACATATGTGTATACTTTGCGATCCTCAGGTGTTCTG
 GCCAAATATTCTCTCAATAAGTCCTTCAATACGTTTTCTTAATAACAACCTGGACTTGGT
 AAGAATCGCGCCTCAACTGCTGAGTTACCTCCGCTACTAGAACATTGTGCTGCATCTTC
 TTTCTAGATTTTATTATCCGCACTATAGCAGCTTCTATCTCATGTTTTCTGTCGGCGTCT
 ACTTTCTGCCTTGTCTTTCTCTCTCTGGGTCGGATTACCTTGTGTTGGCAGCAACTGTT
 TGAATCTTGACTCTGTGATGTTGGATGTGAACTGATCATTACCTGTAATATATGACCA
 TTTTCTATTTCTTTGATTTGGGGTCTTTTGAAGAACCCGCTGTGTTGTTTACCACC
 AGCGAGGGACTGTAGNCTCTAACAGCTCCTCTTTCAGGATATCTGGCCCTTGCTGAATT
 TCCTCAAAGTGAATTTNCTCTTTTATAAAAAGAGCATAAATGGTCATCTGGAAAGGGGAA
 CTTGA

Restriction Sites:

NotI-NotI

ACCN:

NM_003590

Insert Size:

5580 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_003590.2](#), [NP_003581.1](#)

RefSeq Size: 6787 bp

RefSeq ORF: 2307 bp

Locus ID: 8452

UniProt ID: [Q13618](#)

Cytogenetics: 2q36.2

Domains: CULLIN

Protein Families: Druggable Genome

Protein Pathways: Ubiquitin mediated proteolysis

Gene Summary: This gene encodes a member of the cullin protein family. The encoded protein plays a critical role in the polyubiquitination and subsequent degradation of specific protein substrates as the core component and scaffold protein of an E3 ubiquitin ligase complex. Complexes including the encoded protein may also play a role in late endosome maturation. Mutations in this gene are a cause of type 2E pseudohypoaldosteronism. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Mar 2012]

Transcript Variant: This variant (1) encodes 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.