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Product datasheet for RC209273

Cullin 5 (CUL5) (NM_003478) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cullin 5 (CUL5) (NM_003478) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cullin 5
Synonyms:	CUL-5; VACM-1; VACM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC209273 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGACGTCTAATCTGTTAAAGAATAAAGGTTCTCTTCAGTTTGAAGACAAATGGGATTTTATGCGCC
CGATTGTTTTGAAGCTTTTACGCCAGGAATCTGTTACAAAACAGCAGTGGTTTGATCTGTTTTCGGATGT
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CAGATGCTAAATTAAAAGAAGAAGAAAAACGAGCACTACGTTATTTAGAAACAAGACGAGAATGTAACTC
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TGCCAAGGCATGATCAAGAGAAATGAAACTGAAAAATTACATTTAATGTTTTCATTGATGGACAAAGTTC
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TACAGAACAAAGATGTTTTTATGAGGTATCATAAAGCTCATTTGACACGACGTCTTATATTAGACATCTC
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AAATGAGAAAGAAAATTAGTAATGCTCAGCTGCAGACTGAATTAGTAGAAATTTTGAAAAACATGTTCTT
GCCACAAAAGAAAATGATAAAAGAGCAAATAGAGTGGCTAATAGAGCACAAATACATCAGAAGAGATGAA
TCTGATATCAACACTTTCATATATATGGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209273 protein sequence
Red=Cloning site Green=Tags(s)

MATSNLLKNKGSLQFEDKWDFMRPIVLKLLRQESVTKQQWFDLFSDVHAVCLWDDKGPAKIHQALKEDIL
EFIKQAQARVLSHQDDTALLKAYIVEWRKFFTQCDILPKPFCQLEITLMGKQGSNKKSNVEDSIVRKLML
DTWNESIFSNIKNRLQDSAMKLVHAERLGEAFDSQLVIGVRESYVNLCSNPEDKLQIYRDNFEKAYLDST
ERFYRTQAPSYLQQNGVQNYMKYADAKLKEEEKRALRYLETRRECNSVEALMECCVNALVTSFKETILAE
CQGMIKRNETEKLHLMFSLMDKVPNGIEPMLKDLEEHIISAGLADMVAAAETITTDSEKYVEQLLTLFNR
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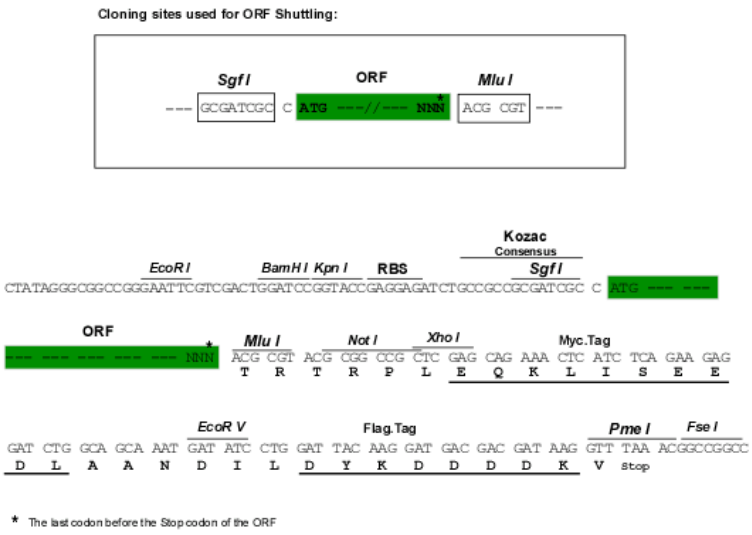
NKLARMFQDIKVSEDLNQAFKEMHKNNKLALPADSVNIKILNAGAWSRSSEKVFVSLPTELEDLIPEVEE
FYKKNHSGRKLHWHHLMSNGIITFKNEVGQYDLEVTTFQLAVLFAWNQRPREKISFENLKLATELPDAEL
RRTLWSLVAFPKLKRQVLLYEPQVNSPKDFTEGTLFSVNQEFSLIKNAKVQKRGKINLIGRLQLTTERMR
EEENEGIVQLRILRTQEAIIQIMKMRKKISNAQLQTELVEILKNMFLPQKKMIKEQIEWLIEHKYIRRDE
SDINTFIYMA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6126_h09.zip

Restriction Sites: SgfI-MluI

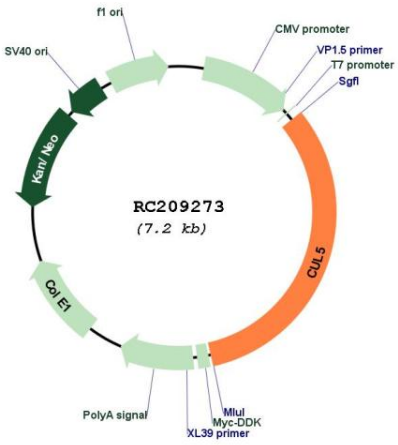
Cloning Scheme:



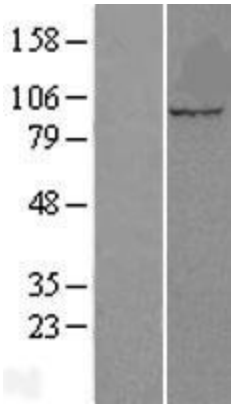
ACCN:	NM_003478
ORF Size:	2340 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_003478.2
RefSeq Size:	6408 bp
RefSeq ORF:	2343 bp
Locus ID:	8065
UniProt ID:	Q93034
Cytogenetics:	11q22.3
Domains:	CULLIN
Protein Families:	Druggable Genome
Protein Pathways:	Ubiquitin mediated proteolysis
MW:	91 kDa
Gene Summary:	Core component of multiple SCF-like ECS (Elongin-Cullin 2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component. ECS(SOCS1) seems to direct ubiquitination of JAK2. Seems to be involved in proteosomal degradation of p53/TP53 stimulated by adenovirus E1B-55 kDa protein. May form a cell surface vasopressin receptor.[UniProtKB/Swiss-Prot Function]

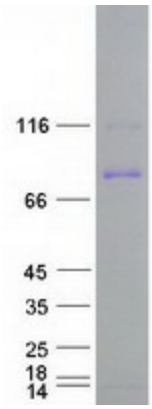
Product images:



Circular map for RC209273



Western blot validation of overexpression lysate (Cat# [LY401176]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209273 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CUL5 protein (Cat# [TP309273]). The protein was produced from HEK293T cells transfected with CUL5 cDNA clone (Cat# RC209273) using MegaTran 2.0 (Cat# [TT210002]).