

Product datasheet for **TP324650M**

Cullin 1 (CUL1) (NM_003592) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human cullin 1 (CUL1), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC224650 representing NM_003592 Red =Cloning site Green =Tags(s)

MSSTRSQNP HGLKQIGLDQIWDDL RAGIQQVYTRQ SMAKSRMELYTHVYNYCTSVH QSNQARGAGVPPS
KSKKGQTPGGAQFVGL ELYKRLKEFLKNYLTNLLKDGEDLMDESVLKFYTQQWEDYR FSSKVLNGICAYL
NRHWVRRECDEGRKGIYEIYSLALVTWRDCLFRPLNKQVTNAVLK LIEKERNGETINTRLISGVVQSYVE
LGLNEDDAFAKGP TLTVYKESFESQFLADTERFYTRETEFLQQNPVTEYMKKAEARLLEEQR RVQVYLH
ESTQDELARKCEQV LIEKHLEIFHTEFQNL LDADKNE DLGRMYNLVSRIQDGLGELKKLLETHIHNQGLA
AIEKCGEALNDPKMYVQTVLDVHKKYNALVMSAFNNDAGFVAALDKACGRFINNNAVTKMAQSSSKSPE
LLARYCD SLLKSSKNPEEAELEDTLNQVMVFKYIEDKDV FQKFYAKMLAKRLVHQNSASDDAEASMI S
KLKQACGF EYTSKLQRMFQDIGVSKDLNEQFKH LTNSEPLD LDFSQVLSSGSWPFQQSCTFALPSELE
RSYQRFTA FYASRHSGRKLTWLYQLSKGELVTNCFKNRYTLQASTFQMAILLQYNTEDAYTVQQLT DSTQ
IKMDILAQVLQILLKSKLLVLEDENANVDEVELKPD TLIKLYLGYKNKKLRVNINVPMKTEQKQE QETTH
KNIEEDRLLIQAAIVRIMKMRKVLKHQQLLGEVLTQLSSRFKPRVPVIKKCIDILIEKEYLERVDGEKD
TYSYLA

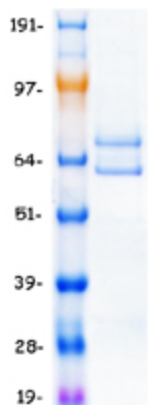
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	89.5 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.



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Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_003583
Locus ID:	8454
UniProt ID:	Q13616 , A0A090N7U0 , B3KTW0
RefSeq Size:	3226
Cytogenetics:	7q36.1
RefSeq ORF:	2328
Summary:	<p>Core component of multiple cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. SCF complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:27565346). In the SCF complex, serves as a rigid scaffold that organizes the SKP1-F-box protein and RBX1 subunits. 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 exchange of the substrate recognition component is mediated by TIP120A/CAND1. The functional specificity of the SCF complex depends on the F-box protein as substrate recognition component. SCF(BTRC) and SCF(FBXW11) direct ubiquitination of CTNNB1 and participate in Wnt signaling. SCF(FBXW11) directs ubiquitination of phosphorylated NFKBIA. SCF(BTRC) directs ubiquitination of NFKBIB, NFKBIE, ATF4, SMAD3, SMAD4, CDC25A, FBXO5 and probably NFKB2. SCF(BTRC) and/or SCF(FBXW11) direct ubiquitination of CEP68 (PubMed:25704143, PubMed:25503564). SCF(SKP2) directs ubiquitination of phosphorylated CDKN1B/p27kip and is involved in regulation of G1/S transition. SCF(SKP2) directs ubiquitination of ORC1, CDT1, RBL2, ELF4, CDKN1A, RAG2, FOXO1A, and probably MYC and TAL1. SCF(FBXW7) directs ubiquitination of CCNE1, NOTCH1 released notch intracellular domain (NICD), and probably PSEN1. SCF(FBXW2) directs ubiquitination of GCM1. SCF(FBXO32) directs ubiquitination of MYOD1. SCF(FBXO7) directs ubiquitination of BIRC2 and DLGAP5. SCF(FBXO33) directs ubiquitination of YBX1. SCF(FBXO1) directs ubiquitination of BCL6 and DTL but does not seem to direct ubiquitination of TP53. SCF(BTRC) mediates the ubiquitination of NFKBIA at 'Lys-21' and 'Lys-22'; the degradation frees the associated NFKB1-RELA dimer to translocate into the nucleus and to activate transcription. SCF(CCNF) directs ubiquitination of CCP110. SCF(FBXL3) and SCF(FBXL21) direct ubiquitination of CRY1 and CRY2. SCF(FBXO9) directs ubiquitination of TTI1 and TELO2. SCF(FBXO10) directs ubiquitination of BCL2.[UniProtKB/Swiss-Prot Function]</p>
Protein Families:	Druggable Genome
Protein Pathways:	Cell cycle, Oocyte meiosis, TGF-beta signaling pathway, Ubiquitin mediated proteolysis, Wnt signaling pathway

Product images:

Coomassie blue staining of purified CUL1 protein (Cat# [TP324650]). The protein was produced from HEK293T cells transfected with CUL1 cDNA clone (Cat# [RC224650]) using MegaTran 2.0 (Cat# [TT210002]).