

Datasheet for ABIN7553606

Cullin 1 Protein (CUL1) (AA 1-776) (His tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	Cullin 1 (CUL1)
Protein Characteristics:	AA 1-776
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cullin 1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat CUL1 Protein expressed in mammalian cells.
Sequence:	MSSTRSQNPH GLKQIGLDQI WDDLRAIGIQ VYTRQSMAS RYMELYTHVY NYCTSVHQSN QARGAGVPPS KSKKGQTPGG AQFVGLELYK RLKEFLKNYL TNLLKDGEDL MDESVLKFYT QQWEDYRFSS KVLNGICAYL NRHWVRRECD EGRKGIYEIY SLALVTWRDC LFRPLNKQVT NAVLKIEKE RNGETINTRL ISGVVQSYVE LGLNEDDAFA KGPTLTVYKE SFESQFLADT ERFYTRETE FLQQNPVTEY MKKAEARLLE EQRRVQVYLH ESTQDELARK CEQVLIEKHL EIFHTEFQNL LDADKNEDLG RMYNLVSRIQ DGLGELKLL ETHIHNQGLA AIEKCGEAAL NDPKMYVQTV LDVHKYNAL VMSAFNNDAG FVAALDKACG RFINNAVTK MAQSSSKSPE LLARYCDSLL KKSSKNPEEA ELEDTLNQVM VFKYIEDKD VFQKFYAKML AKRLVHQNSA SDDAEASMIS KLKQACGFY TSKLQRMFQD IGVSKDLNEQ FKKHLTNSEP LDLDFSIQVL SSGSWPFQQS CTFALPSELE RSYQRFTAFY ASRHSGRKL T WLYQLSKGEL VTNCFKNRYT LQASTFQMAI LLQYNTEDAY TVQQLTDSTQ IKMDILAQVL QILLKSKLLV LEDENANVDE

Product Details

VELKPDTLIK LYLGYKNKKL RVNINVPMKT EQKQEQTTH KNIEEDRKLL IQAAIVRIMK

MRKVLKHQQL LGEVLTQLSS RFKPRVPVIK KCIDILIEKE YLERVDGEKD TSYLA **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

Cullin 1 (CUL1)

Alternative Name:

CUL1 ([CUL1 Products](#))

Background:

Cullin-1 (CUL-1),FUNCTION: 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, PubMed:22017875, PubMed:22017877). 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

Target Details

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 TEO2. SCF(FBXO10) directs ubiquitination of BCL2.

{ECO:0000269|PubMed:15531760, ECO:0000269|PubMed:15640526, ECO:0000269|PubMed:18644861, ECO:0000269|PubMed:19679664, ECO:0000269|PubMed:22017875, ECO:0000269|PubMed:22017877, ECO:0000269|PubMed:22113614, ECO:0000269|PubMed:22405651, ECO:0000269|PubMed:23263282, ECO:0000269|PubMed:23431138, ECO:0000269|PubMed:25503564, ECO:0000269|PubMed:25704143, ECO:0000269|PubMed:27565346, ECO:0000269|PubMed:9663463}.

Molecular Weight: 89.7 kDa

UniProt: [Q13616](#)

Pathways: [Cell Division Cycle](#), [Hedgehog Signaling](#), [Mitotic G1-G1/S Phases](#), [Regulation of Cell Size](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months