abcam

Product datasheet

Recombinant Human Cullin 1 protein ab91876

1 Image

Overview

Product name	Recombinant Human Cullin 1 protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Escherichia coli

Amino Acid Sequence

Species	Human
Sequence	LTNSEPLDLDFSIQVLSSGSWPFQQSCTFALPSELERSYQRFTAFYASRH SG RKLTWLYQLSKGELVTNCFKNRYTLQASTFQMAILLQYNTEDAYTV QQLTDS TQIKMDILAQVLQILLKSKLLVLEDENANVDEVELKPDTLIK LYLGYKNKKL RVNINVPMKTEQKQEQETTHKNIEEDRKLLIQAAIVRI MKMRKVLKHQQLLG EVLTQLSSRFKPRVPVIKKCIDILIEKEYLERVD GEKDTYSYLA
Amino acids	525 to 776

Specifications

Our Abpromise guarantee covers the use of **ab91876** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Mass Spectrometry
Form	Lyophilised
Additional notes	Protein Identity confirmed by Mass Spectrometry (MS/MS) (acquired on initial reference batch).

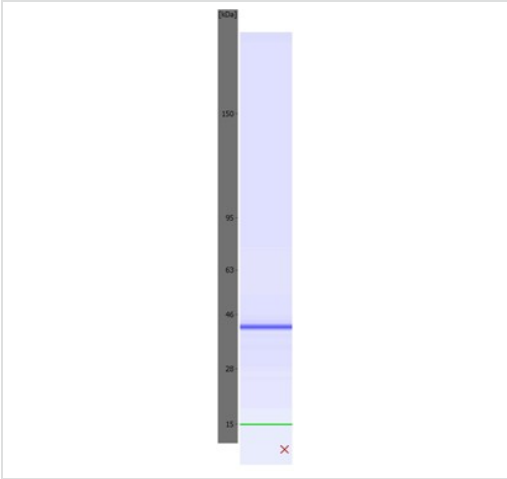
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. Preservative: None Constituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5
Reconstitution	Reconstitute with 83 µl aqua dest.

General Info

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. 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 is inhibited by the association of the deneddylated cullin subunit with 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(SKP2) directs ubiquination of phosphorylated CDKN1B/p27kip and is involved in regulation of G1/S transition. SCF(SKP2) directs ubiquination of ORC1, CDT1, RBL2, ELF4, CDKN1A, RAG2, FOXO1A, and probably MYC and TAL1. SCF(FBXW7) directs ubiquitination of cyclin E, 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(FBXO11) 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(Cyclin F) directs ubiquitination of CP110.
Tissue specificity	Expressed in lung fibroblasts.
Pathway	Protein modification; protein ubiquitination.
Sequence similarities	Belongs to the cullin family.
Post-translational modifications	Neddylated; which enhances the ubiquitination activity of SCF. Deneddylated via its interaction with the COP9 signalosome (CSN) complex. Deneddylated by Epstein-Barr virus BPLF1 leading to a S-phase-like environment that is required for efficient replication of the viral genome.

Images



SDS-PAGE - Cullin 1 protein (Tagged-His Tag) (ab91876)

The image shows an electrophoretic assay performed using an Agilent 5100 ALP. In some images coloured control bands can be seen at 15 kDa (green) and/or 240 kDa (purple). The protein-specific band is blue.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit http://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors