


Product datasheet

Anti-Cullin 1/CUL-1 antibody [EPR3102Y] α b75812

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [6 References](#) [4 Images](#)

Overview

Product name	Anti-Cullin 1/CUL-1 antibody [EPR3102Y]
Description	Rabbit monoclonal [EPR3102Y] to Cullin 1/CUL-1
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF Unsuitable for: IHC-P or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide within Human Cullin 1/CUL-1 aa 200-300. The exact sequence is proprietary.
Positive control	293T, A549 and T47D cell lysates; HeLa cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3102Y

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab75812 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/1000 - 1/2000. Predicted molecular weight: 90 kDa.
ICC/IF	★★★★★ (1)	1/100 - 1/250.

Application notes

Is unsuitable for IHC-P or IP.

Target

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 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 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.

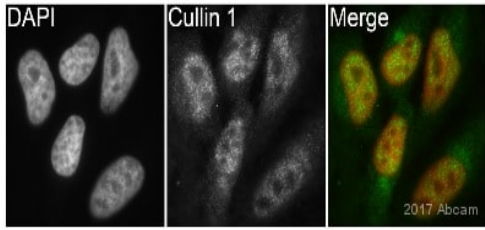
Sequence similarities

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.

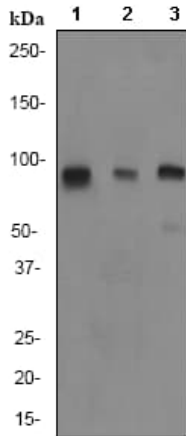
Images



Immunocytochemistry/ Immunofluorescence - Anti-Cullin 1/CUL-1 antibody [EPR3102Y] (ab75812)

This image is courtesy of an Abreview submitted by Kirk McManus, Univ. of Manitoba/Cancer Care MCB.

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells labeling Cullin 1/CUL-1 with ab75812 at 1/400 dilution. Cells were fixed in paraformaldehyde and permeabilized with 0.5% Triton X-100 in PBS. Staining with ab75812 at 1/400 was carried in PBS buffer for 1 hour at 22°C. **ab150081**, a Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody was used at 1/200 dilution. DAPI was used to counterstain.



Western blot - Anti-Cullin 1/CUL-1 antibody [EPR3102Y] (ab75812)

All lanes : Anti-Cullin 1/CUL-1 antibody [EPR3102Y] (ab75812) at 1/2000 dilution

Lane 1 : 293T cell lysate

Lane 2 : A549 cell lysate

Lane 3 : T47D cell lysate

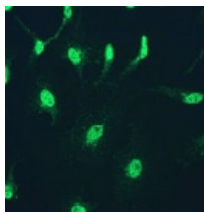
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 90 kDa

Observed band size: 90 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Cullin 1/CUL-1 antibody [EPR3102Y] (ab75812)

ab75812 at 1/100 dilution staining Cullin 1/CUL-1 in HeLa cells by Immunofluorescence.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Cullin 1/CUL-1 antibody [EPR3102Y] (ab75812)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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