# abcam

## Product datasheet

## Anti-Cullin 1/CUL-1 antibody [EPR3103Y] ab75817



重组 RabMAb

25 References 13 图像

概述

产品名称 Anti-Cullin 1/CUL-1抗体[EPR3103Y]

描述 兔单克隆抗体[EPR3103Y] to Cullin 1/CUL-1

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide within Human Cullin 1/CUL-1 aa 750 to the C-terminus (C terminal). The exact

sequence is proprietary.

阳性对照 HeLa, MCF7, A549 and PC12 cell lysates; human cervical carcinoma tissue.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 **EPR3103Y** 

同种型 lgG

## The Abpromise guarantee

## Abpromise™承诺保证使用ab75817于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/20.
ICC/IF		1/100 - 1/250.
WB		1/1000. Detects a band of approximately 90 kDa (predicted molecular weight: 90 kDa). <b>For unpurified, use 1/2500 - 1/5000.</b>
IP		1/10 - 1/50.
IHC-P		1/50 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

#### 靶标

#### 功能

Core component of multiple cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitinprotein 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.

组织特异性

Expressed in lung fibroblasts.

通路

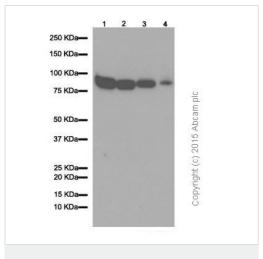
Protein modification; protein ubiquitination.

序列相似性

Belongs to the cullin family.

翻译后修饰

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.



Western blot - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

**All lanes :** Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817) at 1/1000 dilution (purified)

Lane 1 : HeLa cell lysate
Lane 2 : MCF7 cell lysate
Lane 3 : A549 cell lysate

Lane 4: MDA-MB-435 cell lysate

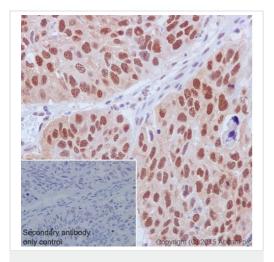
Lysates/proteins at 10 µg per lane.

## Secondary

All lanes: HRP goat anti-rabbit lgG (H+L) at 1/50000 dilution

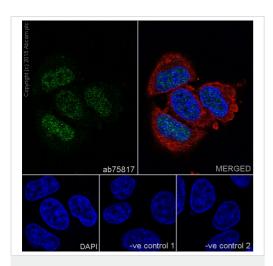
**Predicted band size:** 90 kDa **Observed band size:** 90 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST

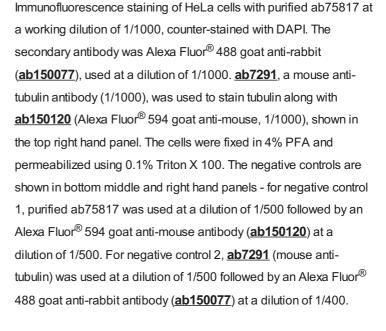


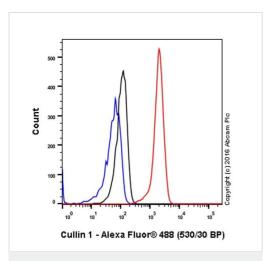
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

Immunohistochemical staining of paraffin embedded human lung carcinoma with purified ab75817 at a working dilution of 1/50. The secondary antibody used is HRP goat anti-rabbit lgG H&L (ab97051) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



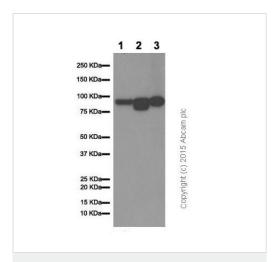
Immunocytochemistry/ Immunofluorescence - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)





Flow Cytometry (Intracellular) - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Cullin 1/CUL-1 with purified ab75817 at 1/20 dilution (10ug/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluorr<sup>®</sup>488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Western blot - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

**All lanes :** Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817) at 1/1000 dilution (purified)

Lane 1 : PC-12 cell lysate
Lane 2 : NIH/3T3 cell lysate

Lane 3: mouse brain cell lysate

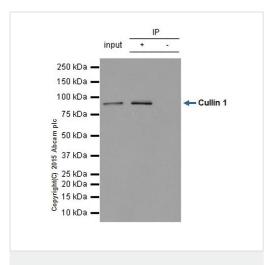
Lysates/proteins at 10 µg per lane.

## Secondary

All lanes: HRP goat anti-rabbit lgG (H+L) at 1/50000 dilution

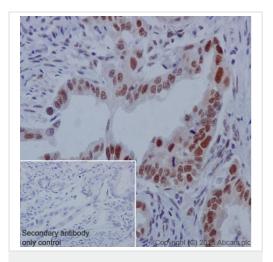
**Predicted band size:** 90 kDa **Observed band size:** 90 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST



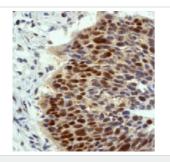
Immunoprecipitation - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

ab75817 (purified) at 1/120 immunoprecipitating Cullin 1 in 10  $\mu$ g MCF7 whole cell lysate (Lanes 1 and 2, observed at 90 kDa). Lane 3 - PBS. For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1500 dilution. Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

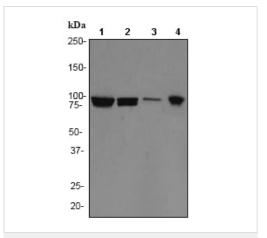
Immunohistochemical staining of paraffin embedded human cervical carcinoma with purified ab75817 at a working dilution of 1/50. The secondary antibody used is HRP goat anti-rabbit IgG H&L (ab97051) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

Unpurified ab75817 at 1/100 dilution staining Cullin 1/CUL-1 in human cervical carcinoma by Immunohistochemistry, Paraffinembedded tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

**All lanes :** Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817) at 1/5000 dilution (unpurified)

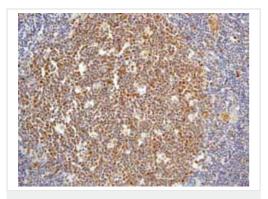
Lane 1: HeLa cell lysate
Lane 2: MCF7 cell lysate
Lane 3: A549 cell lysate
Lane 4: PC12 cell lysate

Lysates/proteins at 10 µg per lane.

## Secondary

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

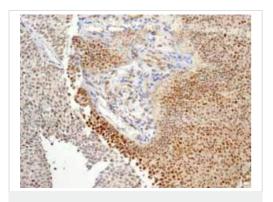
**Predicted band size:** 90 kDa **Observed band size:** 90 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

Unpurified ab75817 showing positive staining in Normal human tonsil tissue.

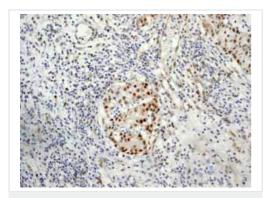
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

Unpurified ab75817 showing positive staining in human Urinary bladder transitional carcinoma tissue.

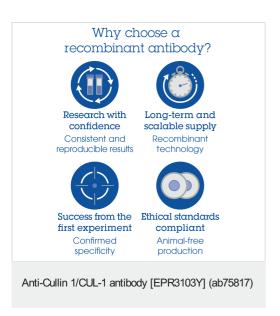
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cullin 1/CUL-1 antibody [EPR3103Y] (ab75817)

Unpurified ab75817 showing positive staining in human Ovarian carcinoma tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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