abcam

Product datasheet

Anti-Cullin 3/CUL-3 antibody ab245410

1 References 3 Images

Overview

Product name Anti-Cullin 3/CUL-3 antibody

Description Rabbit polyclonal to Cullin 3/CUL-3

Host species Rabbit

Tested applications

Suitable for: WB, IP, IHC-P

Species reactivity

Reacts with: Mouse, Human

Predicted to work with: Rat, Xenopus laevis, Xenopus tropicalis

Immunogen Synthetic peptide within Human Cullin 3/CUL-3 aa 650-700. The exact sequence is proprietary.

NP_003581.1

Database link: Q13618

Positive control WB: HeLa, HEK-293T and NIH/3T3 whole cell lysates. IP: HeLa whole cell lysate. IHC-P: Human

breast carcinoma tissue.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 6.8

Preservative: 0.09% Sodium azide

Constituents: Tris buffered saline, 0.1% BSA

Purity Immunogen affinity purified

Purification notes ab245410 was affinity purified using an epitope specific to Cullin 3/CUL-3 immobilized on solid

support.

Clonality Polyclonal

1

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab245410 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		Use a concentration of 0.04 $\mu g/ml$. Predicted molecular weight: 89 kDa.
IP		Use at 2-5 µg/mg of lysate.
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Core component of multiple cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. As a scaffold protein 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 (By similarity). The functional specificity of the BCR complex depends on the BTB domain-containing protein as the susbstrate recognition component. BCR(SPOP) is involved in ubiquitination of BMI1/PCGF4, H2AFY and DAXX, and probably GLI2 or GLI3. BCR(KLHL9-KLHL13) controls the dynamic behavior of AURKB on mitotic chromosomes and thereby coordinates faithful mitotic progression and completion of cytokinesis. Involved in ubiquitination of cyclin E and of cyclin D1 (in vitro) thus involved in regulation of G1/S transition.

Tissue specificity

Widely expressed.

Pathway

Protein modification; protein ubiquitination.

Sequence similarities

Belongs to the cullin family.

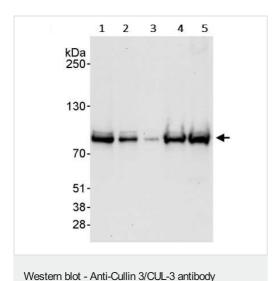
Post-translational modifications

Neddylated. Attachment of NEDD8 is required for the E3 ubiquitin-protein ligase activity of the BCR complex. Deneddylated via its interaction with the COP9 signalosome (CSN) complex.

Cellular localization

Nucleus. Golgi apparatus.

Images



(ab245410)

All lanes: Anti-Cullin 3/CUL-3 antibody (ab245410) at 0.04 µg/ml

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 50 µg

Lane 2 : HeLa whole cell lysate at 15 µg

Lane 3: HeLa whole cell lysate at 5 µg

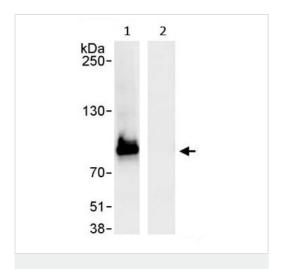
Lane 4 : HEK-293T whole cell lysate at 50 μg

Lane 5: NIH/3T3 (mouse embryo fibroblast cell line) whole cell

lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 89 kDa



Exposure time: 30 seconds

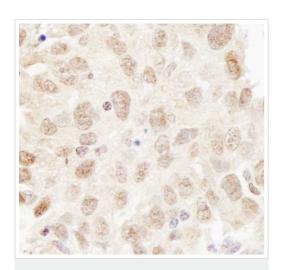
Cullin 3/CUL-3 was immunoprecipitated from HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate (1 mg for IP, 20% of IP loaded) with ab245410 at 3 μ g/mg lysate. Western blot was performed from the immunoprecipitate using ab245410 at 1 μ g/ml.

Lane 1: ab245410 IP in HeLa whole cell lysate.

Lane 2: Control IgG IP in HeLa whole cell lysate.

Detection: Chemiluminescence with exposure time of 10 seconds.

Immunoprecipitation - Anti-Cullin 3/CUL-3 antibody (ab245410)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cullin 3/CUL-3 antibody (ab245410)

Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for Cullin 3/CUL-3 using ab245410 at 1/200 dilution in immunohistochemical analysis. Detection: DAB staining.

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

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