


Product datasheet

Anti-Cullin 4A/CUL-4A antibody ab72548

★★★★★ [3 Abreviews](#) [17 References](#) [4 Images](#)

Overview

Product name	Anti-Cullin 4A/CUL-4A antibody
Description	Rabbit polyclonal to Cullin 4A/CUL-4A
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rabbit, Horse, Chicken, Dog, Turkey, Chimpanzee, Rhesus monkey, Gorilla, Sea urchin, Platypus 
Immunogen	Synthetic peptide corresponding to Human Cullin 4A/CUL-4A (C terminal). Database link: NP_001008895.1
General notes	<p>The 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.</p> <p>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</p>

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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituents: 1.815% Tris, 1.764% Sodium citrate, 0.021% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab72548 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
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★★ (2)	1/1000 - 1/10000. Detects a band of approximately 88 kDa (predicted molecular weight: 88 kDa).
IP		Use at 2-5 µg/mg of lysate.

Target

Function

Core component of multiple cullin-RING-based 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. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component. DCX(DET1-COP1) directs ubiquitination of JUN. DCX(DDB2) directs ubiquitination of XPC. In association with RBX1, DDB1 and DDB2 is required for histone H3 and histone H4 ubiquitination in response to ultraviolet and may be important for subsequent DNA repair. DCX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 and MDM2-dependent ubiquitination of TP53 in response to radiation-induced DNA damage and during DNA replication. In association with DDB1 and SKP2 probably is involved in ubiquitination of CDKN1B/p27kip. Is involved in ubiquitination of HOXA9.

Pathway

Protein modification; protein ubiquitination.

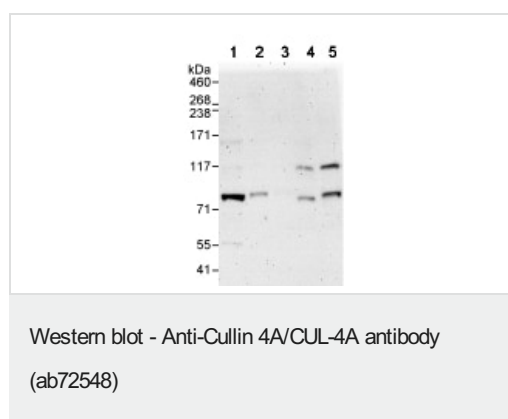
Sequence similarities

Belongs to the cullin family.

Post-translational modifications

Neddylated. Deneddylated via its interaction with the COP9 signalosome (CSN) complex (By similarity). Deneddylated by Epstein-Barr virus BPLF1 leading to a S-phase-like environment that is required for efficient replication of the viral genome.

Images



All lanes : Anti-Cullin 4A/CUL-4A antibody (ab72548) at 0.1 µg/ml

Lane 1 : HeLa whole cell lysate at 50 µg

Lane 2 : HeLa whole cell lysate at 15 µg

Lane 3 : HeLa whole cell lysate at 5 µg

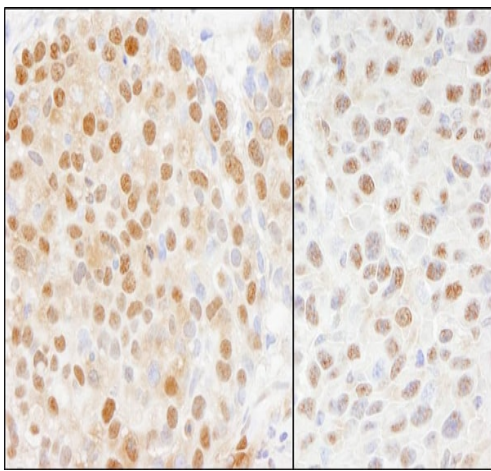
Lane 4 : 293T whole cell lysate at 50 µg

Lane 5 : NIH3T3 whole cell lysate at 50 µg

Predicted band size: 88 kDa

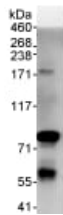
Observed band size: 88 kDa

Additional bands at: 117 kDa. We are unsure as to the identity of these extra bands.



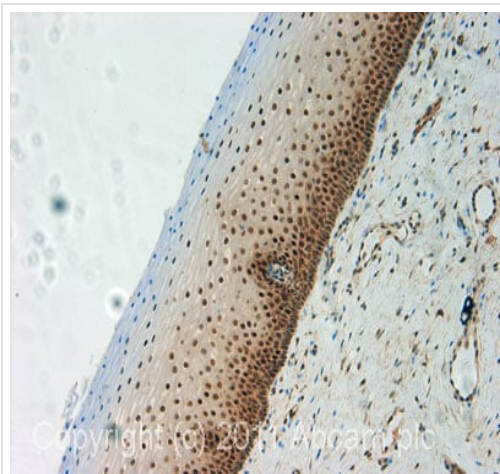
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cullin 4A/CUL-4A antibody (ab72548)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma (left) and mouse squamous cell carcinoma (right) tissues labelling Cullin 4A/CUL-4A with ab72548 at 1/1000 (1 µg/ml). Detection: DAB.



Immunoprecipitation - Anti-Cullin 4A/CUL-4A antibody (ab72548)

Detection of Human Cullin 4A/CUL-4A by Immunoprecipitation from Whole cell lysate from HeLa cells (1 mg for IP, 20% of IP loaded), using ab72548 at 3 µg/mg lysate for IP and at 1 µg/ml for subsequent Western blot detection.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cullin 4A/CUL-4A antibody (ab72548)

IHC image of ab72548 staining in human normal cervix formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with EDTA (pH9, epitope retrieval solution 2) for 20 mins. The section was then incubated with ab72548, 1 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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