abcam

Product datasheet

Anti-Cullin 3/CUL-3 antibody [EPR3196Y] ab75851

Recombinant RabMAb

*** * * 2 Abreviews 12 References 3 Images

Overview

Product name Anti-Cullin 3/CUL-3 antibody [EPR3196Y]

Description Rabbit monoclonal [EPR3196Y] to Cullin 3/CUL-3

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), IP, WB

Unsuitable for: ICC/IF or IHC-P

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control HeLa, SH-SY5Y, PC12 and 3T3 cell lysates.

General notesThis 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**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

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 EPR3196Y

Isotype IgG

1

Applications

The Abpromise quarantee

Our Abpromise quarantee covers the use of ab75851 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
Flow Cyt (Intra)		1/30 - 1/100. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.
WB	★★★★★ (1)	1/20000 - 1/100000. Predicted molecular weight: 89 kDa.

Application notes

Is unsuitable for ICC/IF or IHC-P.

Target

		on

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.

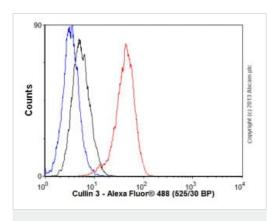
Post-translational modifications

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

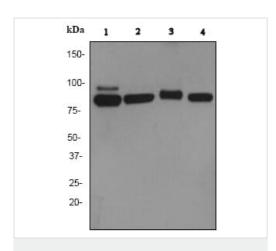
Nucleus. Golgi apparatus.

Images



Flow Cytometry (Intracellular) - Anti-Cullin 3/CUL-3 antibody [EPR3196Y] (ab75851)

Overlay histogram showing HeLa cells stained with ab75851 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab75851, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor 488 goat anti-rabbit lgG (H+L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1 μ g/1x106 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-Cullin 3/CUL-3 antibody [EPR3196Y] (ab75851)

All lanes : Anti-Cullin 3/CUL-3 antibody [EPR3196Y] (ab75851) at 1/20000 dilution

Lane 1: HeLa cell lysate

Lane 2: SH-SY5Y cell lysate

Lane 3: PC12 cell lysate

Lane 4: 3T3 cell lysate

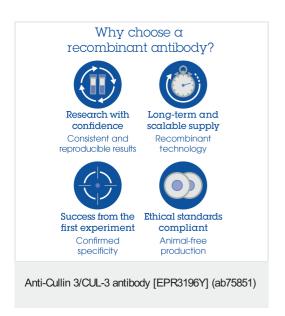
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 89 kDa

Observed band size: 82,90 kDa



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