

Datasheet for ABIN705296
anti-Cullin 3 antibody (AA 411-510)**2** Images**1** Publication[Go to Product page](#)

Overview

| | |
|----------------------|---|
| Quantity: | 100 µL |
| Target: | Cullin 3 (CUL3) |
| Binding Specificity: | AA 411-510 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This Cullin 3 antibody is un-conjugated |
| Application: | ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)) |

Product Details

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|-----------------------|--|
| Immunogen: | KLH conjugated synthetic peptide derived from human Cullin 3 |
| Isotype: | IgG |
| Specificity: | This antibody may detect Cullin-4 A/B |
| Cross-Reactivity: | Human |
| Predicted Reactivity: | Mouse,Rat,Dog,Cow,Pig,Horse,Chicken,Rabbit |
| Purification: | Purified by Protein A. |

Target Details

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|-------------------|--|
| Target: | Cullin 3 (CUL3) |
| Alternative Name: | Cullin 3 (CUL3 Products) |
| Background: | <p>Synonyms: CUL-3, PHA2E, Cullin-3, CUL3, KIAA0617</p> <p>Background: 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 substrate recognition component. BCR(KLHL42) is involved in ubiquitination of KATNA1. BCR(SPOP) is involved in ubiquitination of BMI1/PCGF4, BRMS1, H2AFY and DAXX, GLI2 and GLI3. Can also form a cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex containing homodimeric SPOPL or the heterodimer formed by SPOP and SPOPL, these complexes have lower ubiquitin ligase activity. BCR(KLHL9-KLHL13) controls the dynamic behavior of AURKB on mitotic chromosomes and thereby coordinates faithful mitotic progression and completion of cytokinesis. BCR(KLHL12) is involved in ER-Golgi transport by regulating the size of COPII coats, thereby playing a key role in collagen export, which is required for embryonic stem (ES) cells division: BCR(KLHL12) acts by mediating monoubiquitination of SEC31 (SEC31A or SEC31B). BCR(KLHL3) acts as a regulator of ion transport in the distal nephron, by mediating ubiquitination of WNK4. The BCR(KLHL20) E3 ubiquitin ligase complex is involved in interferon response and anterograde Golgi to endosome transport: it mediates both ubiquitination leading to degradation and 'Lys-33'-linked ubiquitination (PubMed:20389280, PubMed:21840486, PubMed:21670212, PubMed:24768539).</p> |
| Gene ID: | 8452 |
| UniProt: | Q13618 |
| Pathways: | M Phase |

Application Details

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|--------------------|--------------------|
| Application Notes: | ELISA 1:500-1000 |
| | IHC-P 1:200-400 |
| | IHC-F 1:100-500 |
| | IF(IHC-P) 1:50-200 |

Application Details

IF(IHC-F) 1:50-200

IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

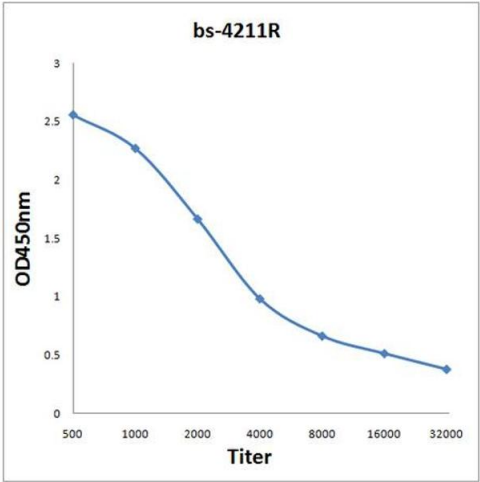
Storage: 4 °C, -20 °C

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

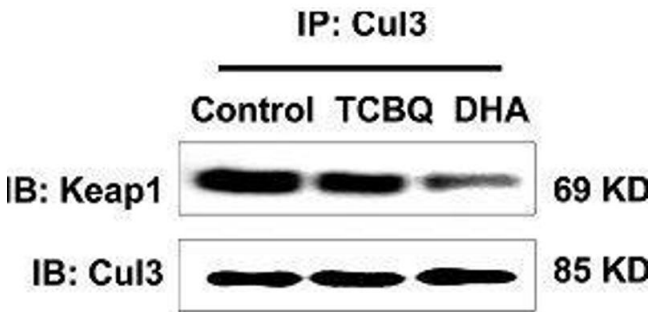
Publications

Product cited in: Su, Zhang, Song, Shi, Fu, Xia, Bai, Hu, Xu, Song, Song: "Tetrachlorobenzoquinone activates nrf2 signaling by keap1 cross-linking and ubiquitin translocation but not keap1-cullin3 complex dissociation." in: **Chemical research in toxicology**, Vol. 28, Issue 4, pp. 765-74, (2015) ([PubMed](#)).



ELISA

Image 1. Antigen: 0.2 µg/100 µL Primary: Antiserum, 1:500, 1:1000, 1:2000, 1:4000, 1:8000, 1:16000, 1:32000; Secondary: HRP conjugated Goat-Anti-Rabbit IgG at 1: 5000; TMB staining; Read the data in MicroplateReader by 450



Immunoprecipitation

Image 2. This image was generously provided by Yang Song, Ph.D. at Southwest University in Chong Qing, China. HepG2 cells were incubated with Rabbit Anti-Cullin 3 Polyclonal Antibody at 4°C overnight and then mixed with Protein A agarose beads at 4°C for 3hrs. The solutions were centrifuged and the pellets were washed with lysis buffer, heated, and subsequently analyzed by Western blotting.