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Rabbit Anti-Cullin 3 antibody

SL4211R

Product Name:	Cullin 3
Chinese Name:	Cullin3抗体
Alias:	CUL 3; Cul-3; CUL3; CUL3_HUMAN; Cullin-3; Cullin3; KIAA0617.
文献引用 PubMed :	**Specific References(1)**|SL4211R has been referenced in 1 publications. **[IF=4.19]**Su, Chuanyang, et al. "Tetrachlorobenzoquinone activates Nrf2 signaling by Keap1 cross-linking and ubiquitin translocation, but not Keap1-Cullin3 complex dissociation." Chemical Research in Toxicology (2015).**ELISA;Human**. PubMed:25742418
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	85kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Cullin 3:411-510/768
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

Product Detail:	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. **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. 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; possibly by mediating ubiquitination of SLC12A3/NCC. Involved in ubiquitination of cyclin E and of cyclin D1 (in vitro) thus involved in regulation of G1/S transition. **Subunit:** Forms neddylation-dependent homodimers. Component of multiple BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complexes formed of CUL3, RBX1 and a variable BTB domain-containing protein acting as both, adapter to cullin and substrate recognition subunit. The BCR complex may be active as a heterodimeric complex, in which NEDD8, covalently attached to one CUL3 molecule, binds to the C-terminus of a second CUL3 molecule. Interacts with RBX1, RNF7, CYCE and TIP120A/CAND1. Part of the BCR(SPOP) containing SPOP. Part of the probable BCR(KLHL9-KLHL13) complex with BTB domain proteins KLHL9 and KLHL13. Part of the BCR(KBTBD10) complex containing KBTBD10. Component of the BCR(KLHL12) E3 ubiquitin ligase complex, at least composed of CUL3 and KLHL12 and RBX1. Component of the BCR(KLHL3) E3 ubiquitin ligase complex, at least composed of CUL3 and KLHL3 and

RBX1 (Probable). Part of the BCR(ENC1) complex containing ENC1. Part of a complex consisting of BMI1/PCGF4, CUL3 and SPOP. Part of a complex consisting of H2AFY, CUL3 and SPOP. Interacts with KCTD5, KLHL9, KLHL13, GAN, ZBTB16, KLHL21, KLHL3, KLHL15, KLHL20, C16orf44, GMCL1P1, BTBD1. Part of a complex that contains CUL3, RBX1 and GAN. Interacts (via BTB domain) with KLHL17; the interaction regulates surface GRIK2 expression.

Subcellular Location:
Nucleus. Golgi apparatus.

Tissue Specificity:
Widely expressed. [PTM] 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.

DISEASE:
Defects in CUL3 are the cause of Pseudohypoaldosteronism type 2E (PHA2E) [MIM:614496]. An autosomal dominant disorder characterized by severe hypertension, hyperkalemia, hyperchloremia, hyperchloremic metabolic acidosis, and correction of physiologic abnormalities by thiazide diuretics.

Similarity:
Belongs to the cullin family.

SWISS:
Q13618

Gene ID:
8452

Database links:

Entrez Gene: 8452 Human

Entrez Gene: 26554 Mouse

Entrez Gene: 301555 Rat

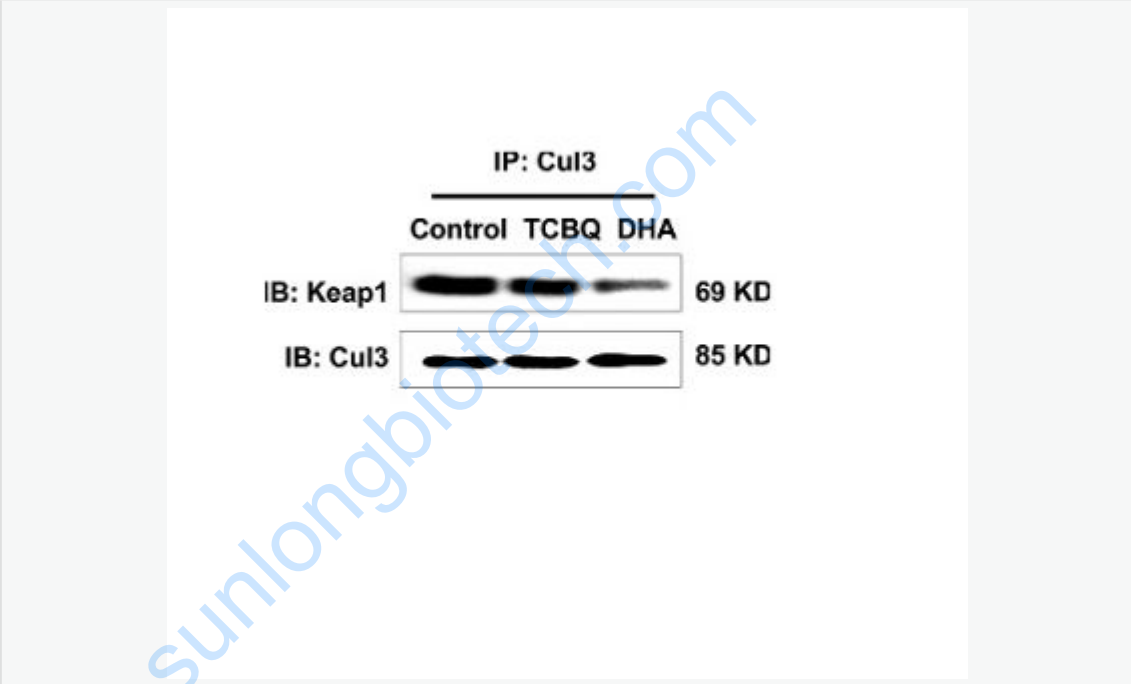
Omim: 603136 Human

SwissProt: Q13618 Human

SwissProt: Q9JLV5 Mouse

SwissProt: B5DF89 Rat

Unigene: 372286 Human

	Unigene: 12665 Mouse Unigene: 101949 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 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 (SL4211R) 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.