

## Anti-Cullin-2 Cul2 Antibody

Catalog Number: A02986

### About CUL2

Anti-Cul2 antibody can be used in western blotting, ELISA and IP. Cullins assemble a potentially large number of ubiquitin ligases by binding to the RING protein ROC1 to catalyse polyubiquitination, as well as binding to various specificity factors to recruit substrates. Cullin 2 is an essential component of the SCF (SKP1-CUL1-F-box protein) E3 ubiquitin ligase complex, which mediates the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. In the SCF complex, cul2 serves as a rigid scaffold that organizes the SKP1-F-box protein and RBX1 subunits. Cul2 may also contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. Cul2 is part of the SCF complex consisting of CUL1, RBX1, SKP1 and SKP2, where it interacts directly with SKP1, SKP2 and RBX1. Cul2 also interacts with RNF7 and is part of a complex with TIP120A/CAND1 and RBX1. The unneddylated form interacts with TIP120A/CAND1 and the interaction negatively regulates the association with SKP1 in the SCF complex.

### Overview

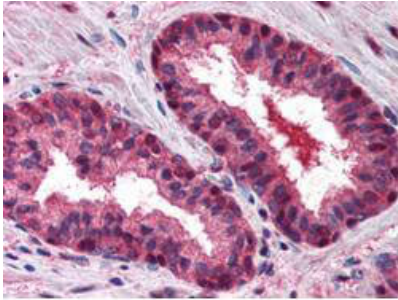
Product Name	Anti-Cullin-2 Cul2 Antibody
Reactive Species	Human
Description	Boster Bio Anti-Cullin-2 Cul2 Antibody (Catalog # A02986). Tested in IHC, IP, WB applications. This antibody reacts with Human.
Application	ELISA, IP, IHC, WB
Clonality	Polyclonal
Formulation	0.01% (w/v) Sodium Azide
Storage Instructions	Store Cul2 antibody at -20°C prior to opening. Aliquot contents and freeze at -20°C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4°C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening. (Ship on dry ice.)
Host	Rabbit
Uniprot ID	Q13617

### Technical Details

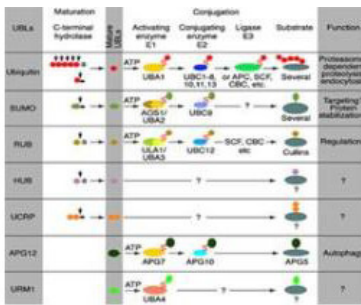
Immunogen	Anti-Cul2 was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-Terminus region near amino acids 720-745 of Human Cul2 coupled to KLH.
Predicted Reactive Species	Bovine, Canine, Equine, Guinea Pig, Zebrafish
Isotype	Antiserum

Form	Liquid (sterile filtered)
Concentration	85 mg/mL by Refractometry
Purification	Antibody is monospecific antiserum processed by delipidation and defibrination followed by sterile filtration. This product reacts with human Cullin 2. Cross-reactivity with Cul2 from other sources has not been determined.
Suggested Dilutions	ELISA: 1:2,000 - 1:10,000 IHC: User optimized IP: 1:500 WB: 1:500 - 1:1,000 Anti-Cul2 has been tested by immunohistochemistry. This antibody reacts with human Cul2 by western blot and immunoprecipitation. The antibody immunoprecipitates in vitro translated product and protein from cell lysates (using HeLa or NIH-3T3). An 86.9 kDa band corresponding to human Cul2 is detected. Most cell lines expressing Cul2 can be used as a positive control. Researchers should determine optimal titers for other applications.

## Anti-Cullin-2 Cul2 Antibody (A02986) Images



Boster's Anti-CUL2 antibody was diluted 1:500 to detect CUL2 in human prostate tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.



Most modifiers mature by proteolytic processing from inactive precursors (a; amino acid). Arrowheads point to the cleavage sites. Ubiquitin is expressed either as polyubiquitin or as a fusion with ribosomal proteins. Conjugation requires activating (E1) and conjugating (E2) enzymes that form thioesters (S) with the modifiers. Modification of cullins by RUB involves SCF(SKP1/cullin-1/F-box protein) /CBC(cullin-2/elongin B/elonginC) -like E3 enzymes that are also involved in ubiquitination. In contrast to ubiquitin, the UBLs do not seem to form multi-UBL chains. UCRP(IGS15) resembles two ubiquitin moieties linked head-to-tail. Whether HUB1 functions as a modifier is currently unclear. APG12 and URM1 are distinct from the other modifiers because they are unrelated in sequence to ubiquitin. Data contributed by S.Jentsch, see references below.

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