

Anti-Cul5 (N-terminal specific) (RABBIT) Antibody
Cul5 Antibody
Catalog # ASR3718**Specification**

Anti-Cul5 (N-terminal specific) (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, IP, I, LCI
Application Note	Anti-Cul5 has been tested by immunohistochemistry. This antibody reacts with human Cul5 by western blot and immunoprecipitation. The antibody immunoprecipitates protein from cell lysates (using 293T, U2OS and others). This antibody also co-immunoprecipitates associated proteins. A 90.9 kDa band corresponding to human Cul5 is detected. Most cell lines expressing Cul4A can be used as a positive control. Researchers should determine optimal titers for other applications.
Physical State	Liquid (sterile filtered)
Immunogen	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an N-Terminal region near amino acids 1-25 of Human Cul5 (N-terminus) coupled to KLH.
Preservative	0.01% (w/v) Sodium Azide

Anti-Cul5 (N-terminal specific) (RABBIT) Antibody - Additional Information**Gene ID** 8065**Other Names**
8065**Purity**

This product is monospecific antiserum processed by delipidation and defibrination followed by sterile filtration. This product reacts with human Cullin 5. Cross reactivity is expected against mouse Cul5 based on a high degree of sequence homology. Cross reactivity with other human cullins may occur.

Storage Condition

Store vial 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.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Cul5 (N-terminal specific) (RABBIT) Antibody - Protein Information

Name CUL5 {ECO:0000303|PubMed:10230407, ECO:0000312|HGNC:HGNC:2556}

Function

Core component of multiple cullin-5-RING E3 ubiquitin-protein ligase complexes (ECS complexes, also named CRL5 complexes), which mediate the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:11384984, PubMed:15601820, PubMed:21199876, PubMed:21980433, PubMed:23897481, PubMed:25505247, PubMed:27910872, PubMed:32200094, PubMed:33268465, PubMed:38418882). Acts as a scaffold protein that contributes to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed:11384984, PubMed:15601820, PubMed:33268465). The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable SOCS box-containing substrate recognition component (PubMed:11384984, PubMed:15601820, PubMed:33268465). Acts as a key regulator of neuron positioning during cortex development: component of various SOCS-containing ECS complexes, such as the ECS(SOCS7) complex, that regulate reelin signaling by mediating ubiquitination and degradation of DAB1 (By similarity). ECS(SOCS1) seems to direct ubiquitination of JAK2 (PubMed:11384984). The ECS(SOCS2) complex mediates the ubiquitination and subsequent proteasomal degradation of phosphorylated EPOR and GHR (PubMed:21980433, PubMed:25505247). The ECS(SPSB3) complex catalyzes ubiquitination of nuclear CGAS (PubMed:38418882). ECS(KLHDC1) complex is part of the DesCEND (destruction via C-end degrons) pathway and mediates ubiquitination and degradation of truncated SELENOS selenoprotein produced by failed UGA/Sec decoding, which ends with a glycine (PubMed:32200094). The ECS(ASB9) complex mediates ubiquitination and degradation of CKB (PubMed:33268465). As part of some ECS complex, promotes 'Lys-11'-linked ubiquitination and degradation of BTRC (PubMed:27910872). As part of a multisubunit ECS complex, polyubiquitinates monoubiquitinated POLR2A (PubMed:19920177). May form a cell surface vasopressin receptor (PubMed:9037604).

Cellular Location

Nucleus. Note=Localizes to sites of DNA damage in a UBAP2 and UBAP2L-dependent manner.

Anti-Cul5 (N-terminal specific) (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Cul5 (N-terminal specific) (RABBIT) Antibody - Images

Rockland's Anti-CUL5 antibody was diluted 1:500 to detect CUL5 in human kidney 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.

Anti-Cul5 (N-terminal specific) (RABBIT) Antibody - Background

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 5 is a component of E3 ubiquitin ligase complexes, which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. Cullin 5 seems to be involved proteasomal degradation of p53/TP53 stimulated by adenovirus E1B-55 kDa protein. Cullin 5 may form a cell surface vasopressin receptor. Cullin 5 is part of a E3 ubiquitin ligase complex with elongin BC complex (TCEB1 and TCEB2), RBX1 and MUF1, complexes with elongin BC complex (TCEB1 and TCEB2), RBX1 and TCEB3 or SOCS1 or WSB1; elongin BC complex (TCEB1 and TCEB2), RBX1 and VHL; elongin BC complex (TCEB1 and TCEB2), RBX1, adenovirus type 5 E1B-55kDa protein and adenovirus type 5 E4-orf6. Cullin 5 Interacts with RBX1 and RNF7.