

# Cullin 5 Rabbit mAb

Catalog # AP75307

### **Product Information**

Application WB Primary Accession <u>Q93034</u>

Reactivity Human, Mouse, Rat

**Host** Rabbi

**Clonality** Monoclonal Antibody

Calculated MW 90955

## **Additional Information**

Gene ID 8065

Other Names CUL5

**Dilution** WB~~1/500-1/1000

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

#### **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:<u>11384984</u>, PubMed:<u>15601820</u>, PubMed:<u>21199876</u>, PubMed:<u>21980433</u>, PubMed:<u>23897481</u>, PubMed:<u>25505247</u>, PubMed:<u>27910872</u>, PubMed:<u>32200094</u>, PubMed:<u>33268465</u>,

PubMed:35512830, PubMed:38418882). Acts 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

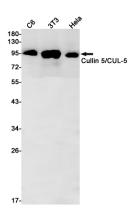
ECS(SPSB3) complex catalyzes ubiquitination of nuclear CGAS (PubMed:38418882). ECS(KLHDC1) complex is part of the DesCEND

(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). As part of the ECS(RAB40C) complex, mediates ANKRD28 ubiquitination and degradation, thereby inhibiting protein phosphatase 6 (PP6) complex activity and focal adhesion assembly during cell migration (PubMed:35512830). As part of the ECS(RAB40A) complex, mediates RHOU 'Lys-48'-linked ubiquitination and degradation, thus inhibiting focal adhesion disassembly during cell migration (PubMed: 26598620). As part of the ECS(RAB40B) complex, mediates LIMA1/EPLIN and RAP2 ubiquitination, thereby regulating actin cytoskeleton dynamics and stress fiber formation during cell migration (PubMed:33999101, PubMed:35293963). 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.

## **Images**



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