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# Cullin 2 Rabbit mAb

Catalog # AP75303

## Product Information

| | |
|---|---|
| **Application** | WB, FC, IP |
| **Primary Accession** | Q13617 |
| **Reactivity** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Monoclonal Antibody |
| **Isotype** | IgG |
| **Conjugate** | Unconjugated |
| **Purification** | Affinity Purified |
| **Calculated MW** | 86983 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 8453 |
| **Other Names** | CUL2 |
| **Dilution** | WB~~1:1000-1:5000 FC~~1:50-1:100 IP~~1:10-1:100 |
| **Format** | Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA. |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

## Protein Information

| | |
|---|---|
| **Name** | CUL2 ( HGNC:2552) |
| **Function** | Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins (PubMed:11384984, PubMed:26138980, PubMed:29775578, PubMed:29779948, PubMed:37844242, PubMed:38326650). CUL2 serves as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the E2 ubiquitin-conjugating enzyme (PubMed:10973499, PubMed:11384984, PubMed:12609982, PubMed:24076655, PubMed:9122164, PubMed:37844242, PubMed:38326650). 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 (PubMed:12609982, PubMed:24076655, PubMed:27565346, PubMed:38326650). The functional specificity of the ECS complex depends on the substrate recognition component (PubMed:10973499, PubMed:26138980, PubMed:29775578, PubMed:29779948, PubMed:9122164, |

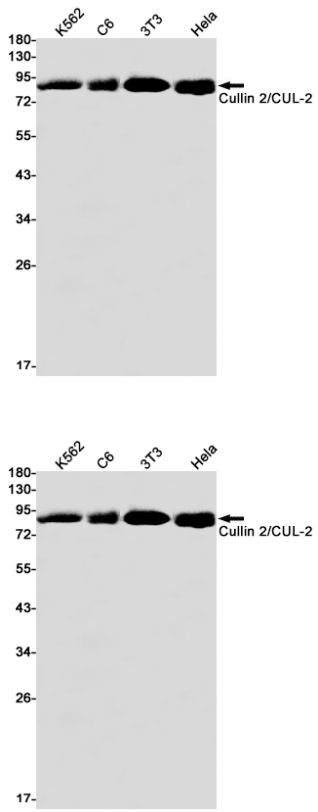
PubMed:38326650). ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (PubMed:10973499, PubMed:9122164). A number of ECS complexes (containing either KLHDC2, KLHDC3, KLHDC10, APPBP2, FEM1A, FEM1B or FEM1C as substrate-recognition component) are part of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:26138980, PubMed:29775578, PubMed:29779948, PubMed:37844242). ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:27565346). ECS(LRR1) ubiquitinates MCM7 and promotes CMG replisome disassembly by VCP and chromatin extraction during S- phase (By similarity).

**Cellular Location** Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

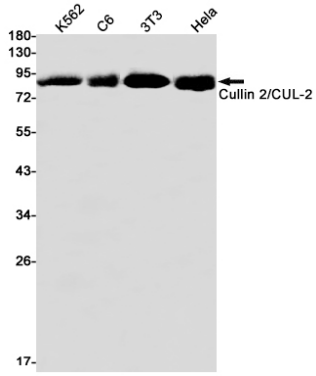
## Background

Enables ubiquitin protein ligase binding activity. Predicted to be involved in SCF-dependent proteasomal ubiquitin-dependent protein catabolic process and protein ubiquitination. Predicted to act upstream of or within protein catabolic process. Located in nucleoplasm. Part of Cul2-RING ubiquitin ligase complex.

## Images




Western blot analysis of Cullin 2/CUL2 in K562, C6, 3T3, Hela lysates using Cullin 2 antibody.




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