

**CUL-2 Polyclonal Antibody**  
Catalog # AP69341**Specification****CUL-2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q13617</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal

**CUL-2 Polyclonal Antibody - Additional Information**

Gene ID 8453

**Other Names**

CUL2; Cullin-2; CUL-2

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**CUL-2 Polyclonal Antibody - 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](http://www.uniprot.org/citations/11384984), PubMed: [26138980](http://www.uniprot.org/citations/26138980), PubMed: [29775578](http://www.uniprot.org/citations/29775578), PubMed: [29779948](http://www.uniprot.org/citations/29779948)). CUL2 may serve as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed: [10973499](http://www.uniprot.org/citations/10973499), PubMed: [11384984](http://www.uniprot.org/citations/11384984), PubMed: [12609982](http://www.uniprot.org/citations/12609982), PubMed: [24076655](http://www.uniprot.org/citations/24076655), PubMed: [9122164](http://www.uniprot.org/citations/9122164)). 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:<a href="http://www.uniprot.org/citations/12609982" target="\_blank">12609982</a>, PubMed:<a href="http://www.uniprot.org/citations/24076655" target="\_blank">24076655</a>, PubMed:<a href="http://www.uniprot.org/citations/27565346" target="\_blank">27565346</a>). The functional specificity of the ECS complex depends on the substrate recognition component (PubMed:<a href="http://www.uniprot.org/citations/10973499" target="\_blank">10973499</a>, PubMed:<a href="http://www.uniprot.org/citations/26138980" target="\_blank">26138980</a>, PubMed:<a href="http://www.uniprot.org/citations/29775578" target="\_blank">29775578</a>, PubMed:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>, PubMed:<a href="http://www.uniprot.org/citations/9122164" target="\_blank">9122164</a>). ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (PubMed:<a href="http://www.uniprot.org/citations/10973499" target="\_blank">10973499</a>, PubMed:<a href="http://www.uniprot.org/citations/9122164" target="\_blank">9122164</a>). 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:<a href="http://www.uniprot.org/citations/26138980" target="\_blank">26138980</a>, PubMed:<a href="http://www.uniprot.org/citations/29775578" target="\_blank">29775578</a>, PubMed:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>). ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:<a href="http://www.uniprot.org/citations/27565346" target="\_blank">27565346</a>). ECS(LRR1) ubiquitinates MCM7 and promotes CMG replisome disassembly by VCP and chromatin extraction during S- phase (By similarity).

#### Cellular Location

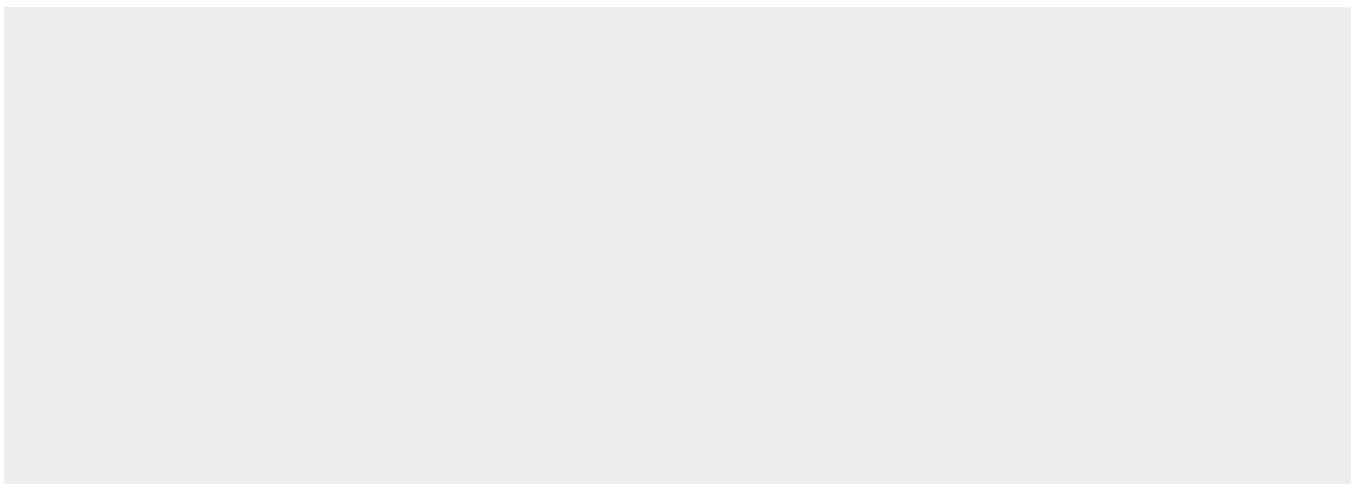
Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

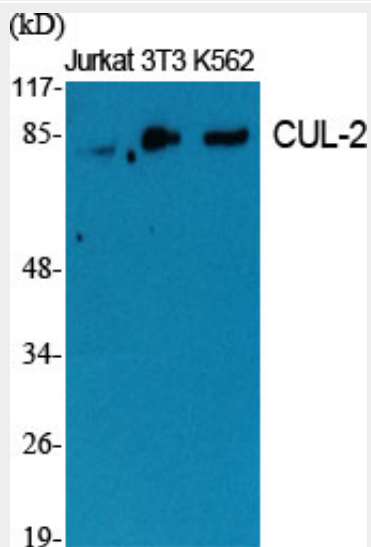
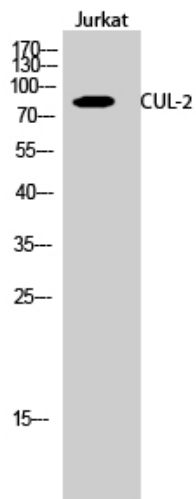
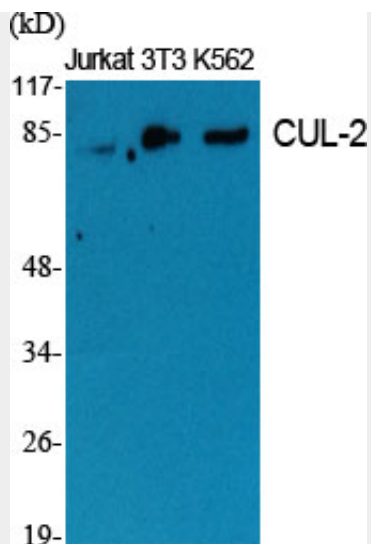
#### CUL-2 Polyclonal Antibody - Protocols

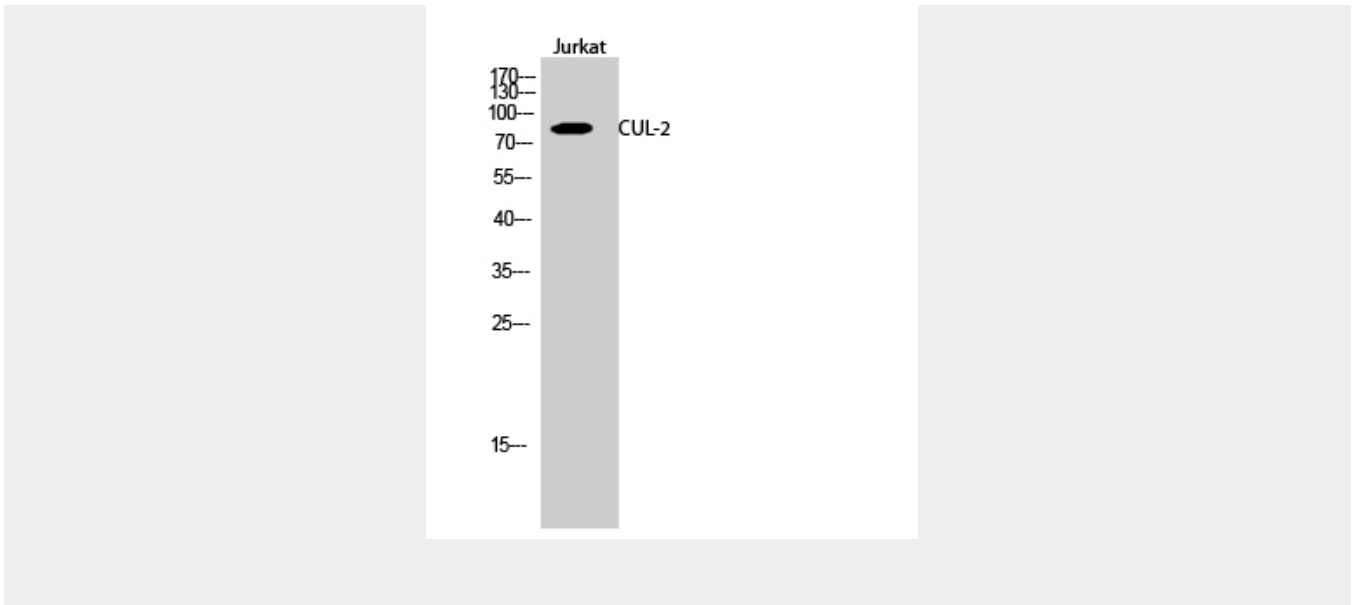
Provided below are standard protocols that you may find useful for product applications.

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

#### CUL-2 Polyclonal Antibody - Images







### **CUL-2 Polyclonal Antibody - Background**

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. ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:27565346). May serve as a rigid scaffold in the complex and 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. The functional specificity of the ECS complex depends on the substrate recognition component. ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF).