

CUL-2 Polyclonal Antibody Catalog # AP69341

Specification

CUL-2 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IF
Primary Accession	Q13617
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.

IHC-P~~N/A

IF~~~1:50~200

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, PubMed:26138980, PubMed:29775578, PubMed:29779948, 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:>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). 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

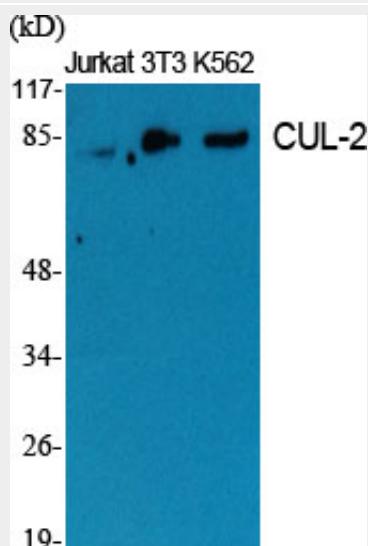
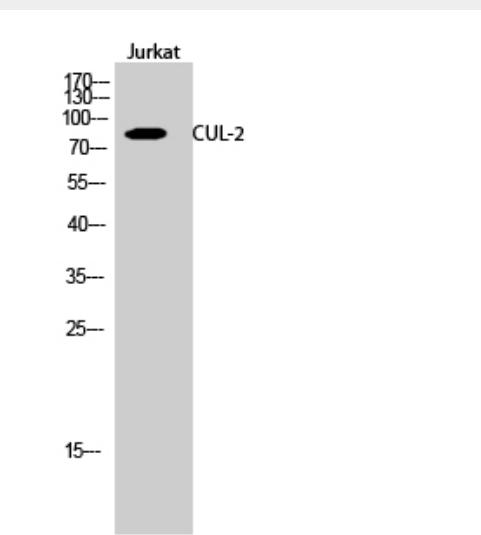
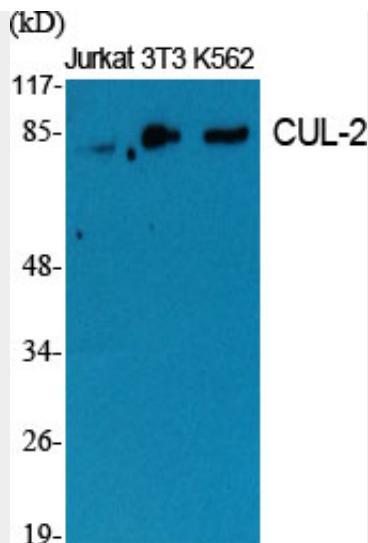
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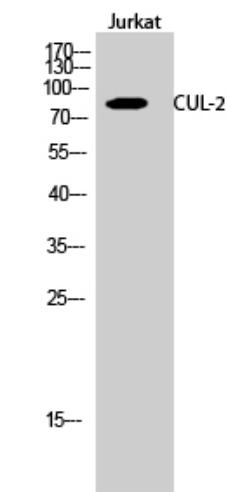
CUL-2 Polyclonal Antibody - Protocols

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).