

**CUL2 / Cullin 2 Antibody (aa696-745)**  
Rabbit Polyclonal Antibody  
Catalog # ALS14746**Specification**

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**CUL2 / Cullin 2 Antibody (aa696-745) - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">Q13617</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 E~~N/A

**CUL2 / Cullin 2 Antibody (aa696-745) - Additional Information**

Gene ID 8453

**Other Names**

Cullin-2, CUL-2, CUL2

**Target/Specificity**

Cullin 2 Antibody detects endogenous levels of total Cullin 2 protein.

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**

CUL2 / Cullin 2 Antibody (aa696-745) is for research use only and not for use in diagnostic or therapeutic procedures.

**CUL2 / Cullin 2 Antibody (aa696-745) - 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:<a href="http://www.uniprot.org/citations/11384984" target="\_blank">11384984</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/38326650" target="\_blank">38326650</a>). 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:<a

[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), PubMed: [38326650](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/12609982), PubMed: [24076655](http://www.uniprot.org/citations/24076655), PubMed: [27565346](http://www.uniprot.org/citations/27565346), PubMed: [38326650](http://www.uniprot.org/citations/38326650)). The functional specificity of the ECS complex depends on the substrate recognition component (PubMed: [10973499](http://www.uniprot.org/citations/10973499), PubMed: [26138980](http://www.uniprot.org/citations/26138980), PubMed: [29775578](http://www.uniprot.org/citations/29775578), PubMed: [29779948](http://www.uniprot.org/citations/29779948), PubMed: [9122164](http://www.uniprot.org/citations/9122164), PubMed: [38326650](http://www.uniprot.org/citations/38326650)). ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (PubMed: [10973499](http://www.uniprot.org/citations/10973499), PubMed: [9122164](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/26138980), PubMed: [29775578](http://www.uniprot.org/citations/29775578), PubMed: [29779948](http://www.uniprot.org/citations/29779948)). ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed: [27565346](http://www.uniprot.org/citations/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}.

#### Volume

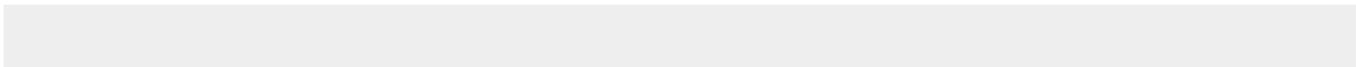
50 µl

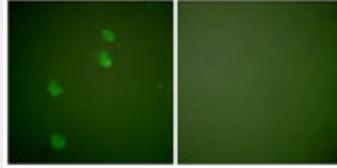
#### CUL2 / Cullin 2 Antibody (aa696-745) - Protocols

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

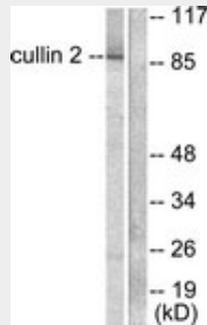
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### CUL2 / Cullin 2 Antibody (aa696-745) - Images

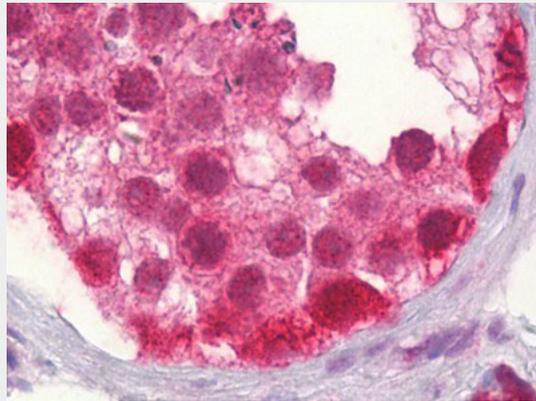




Immunofluorescence of NIH-3T3 cells, using Cullin 2 Antibody.



Western blot of extracts from LOVO cells, using Cullin 2 Antibody.



Anti-CUL2 / Cullin 2 antibody IHC of human testis.

### **CUL2 / Cullin 2 Antibody (aa696-745) - 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. 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 (By similarity). The functional specificity of the ECS complex depends on the substrate recognition component. ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF).

### **CUL2 / Cullin 2 Antibody (aa696-745) - References**

- Pause A., et al. Proc. Natl. Acad. Sci. U.S.A. 94:2156-2161(1997).
- Wada H., et al. Biochem. Biophys. Res. Commun. 257:100-105(1999).
- Ota T., et al. Nat. Genet. 36:40-45(2004).
- Deloukas P., et al. Nature 429:375-381(2004).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.