

Cullin 2 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50189**Specification**

Cullin 2 Antibody - Product Information

Application	WB, IF, IHC
Primary Accession	Q13617
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87,89 KDa
Antigen Region	714-745

Cullin 2 Antibody - Additional Information**Gene ID** 8453**Other Names**

Cullin-2, CUL-2, CUL2

Dilution

WB~~1:1000

IF~~1:100

IHC~~1:50-1:100

FormatRabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

Cullin 2 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:10973499).

[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

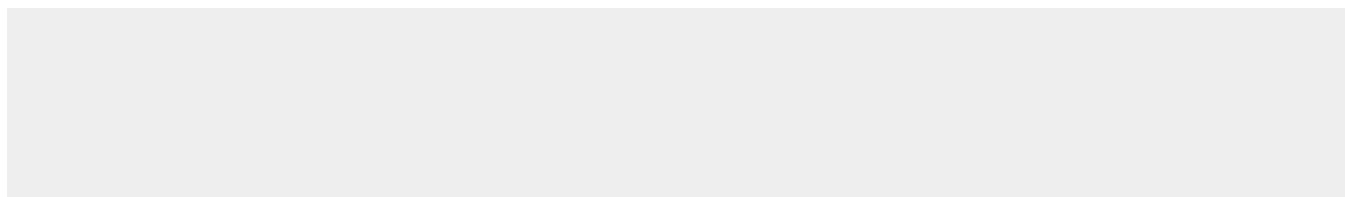
Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

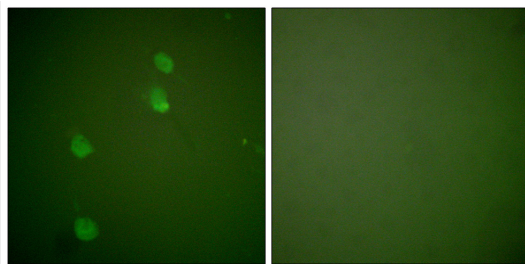
Cullin 2 Antibody - Protocols

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

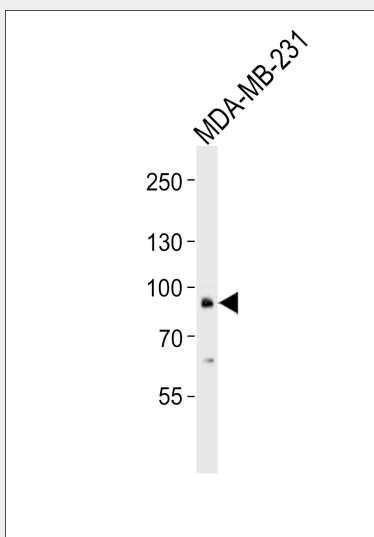
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Cullin 2 Antibody - Images

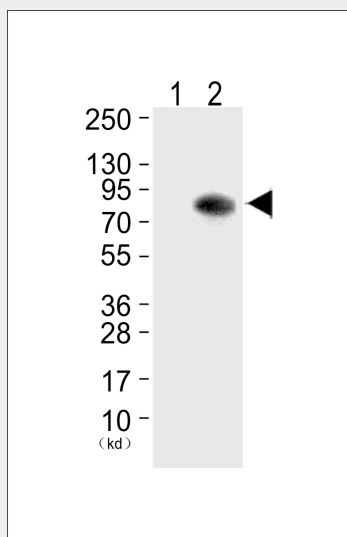




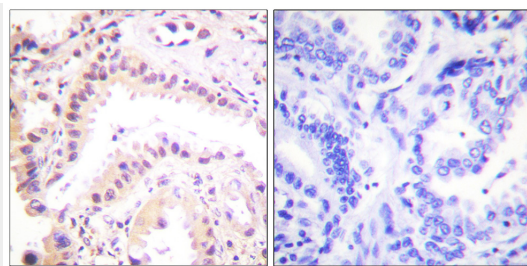
Immunofluorescence analysis of NIH/3T3 cells, using Cullin 2 antibody .



Western blot analysis of lysate from MDA-MB-231 cell line, using Cullin 2 Antibody (C0163). C0163 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35 µg.



Western blot analysis of extracts from HepG2 cells (Lane 2), using Cullin 2 Antibody. The lane on the left is treated with synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using Cullin 2 antibody .

Cullin 2 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. 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).

Cullin 2 Antibody - 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.