

<http://www.uniprot.org/citations/24076655> target="_blank">24076655). 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). The functional specificity of the ECS complex depends on the substrate recognition component (PubMed:9122164, PubMed:10973499, PubMed:26138980, PubMed:29779948, PubMed:29775578). ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (PubMed:9122164, PubMed:10973499). 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:29779948, PubMed:29775578). 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

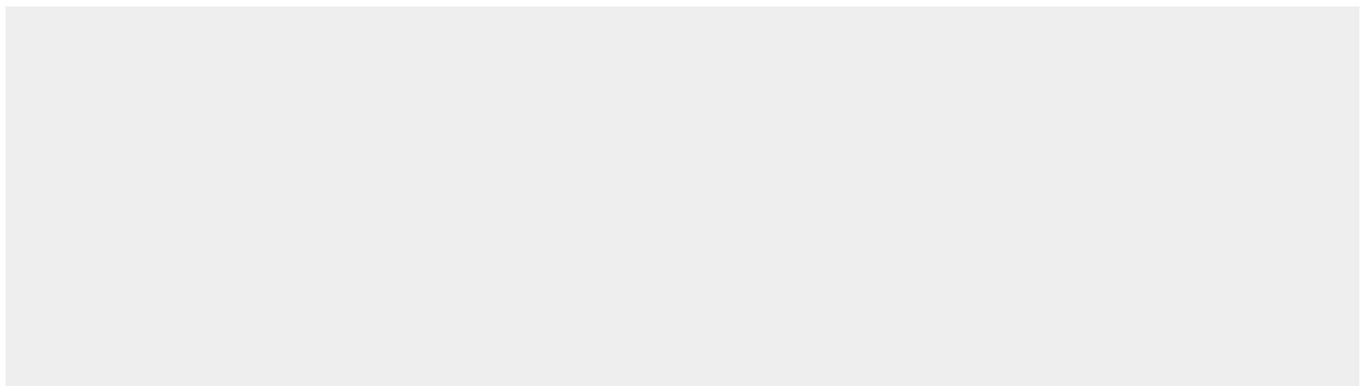
Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

CUL2 / Cullin 2 Antibody (C-Terminus) - Protocols

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

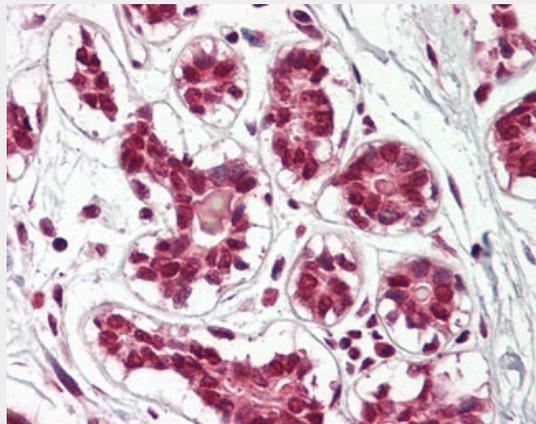
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CUL2 / Cullin 2 Antibody (C-Terminus) - Images





CUL2 antibody (1 ug/ml) staining of NIH3T3 lysate (35 ug protein/ml in RIPA buffer).



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

CUL2 / Cullin 2 Antibody (C-Terminus) - 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 (C-Terminus) - References

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- 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.