

CUL2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16900a

Specification

CUL2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O13617
Other Accession	O9D4H8 , NP_003582.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	86983
Antigen Region	150-179

CUL2 Antibody (N-term) - Additional Information

Gene ID 8453

Other Names

Cullin-2, CUL-2, CUL2

Target/Specificity

This CUL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 150-179 amino acids from the N-terminal region of human CUL2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CUL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CUL2 Antibody (N-term) - 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

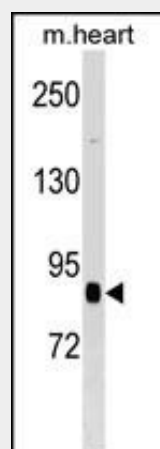
Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

CUL2 Antibody (N-term) - Protocols

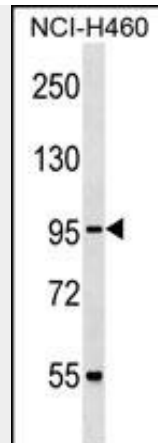
Provided below are standard protocols that you may find useful for product applications.

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

CUL2 Antibody (N-term) - Images



CUL2 Antibody (N-term) (Cat. #AP16900a) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the CUL2 antibody detected the CUL2 protein (arrow).



CUL2 Antibody (N-term) (Cat. #AP16900a) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the CUL2 antibody detected the CUL2 protein (arrow).

CUL2 Antibody (N-term) - 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 Antibody (N-term) - References

- Park, S.W., et al. *APMIS* 117(12):880-885(2009)
- Argyropoulos, G., et al. *Physiol. Genomics* 36(2):79-88(2009)
- Barrett, J.C., et al. *Nat. Genet.* 40(8):955-962(2008)
- Maeda, Y., et al. *J. Biol. Chem.* 283(23):16084-16092(2008)
- Huh, K., et al. *J. Virol.* 81(18):9737-9747(2007)