

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

**Specification**

**CUL2 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q13617</a>
Other Accession	<a href="#">Q9D4H8</a> , <a href="#">NP_003582.2</a>
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

E~~Use at an assay dependent concentration.

**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

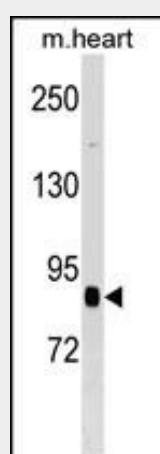
Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

#### CUL2 Antibody (N-term) - Protocols

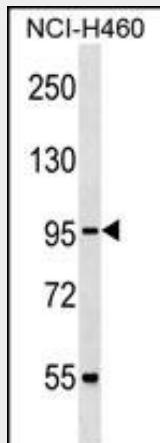
Provided below are standard protocols that you may find useful for product applications.

- [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)