

Cullin 2 Rabbit mAb

Catalog # AP75303

Product Information

Application	WB, IP
Primary Accession	Q13617
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	86983

Additional Information

Gene ID	8453
Other Names	CUL2
Dilution	WB~~1/500-1/1000 IP~~N/A
Format	Liquid

Protein Information

Name CUL2 ([HGNC:2552](#))

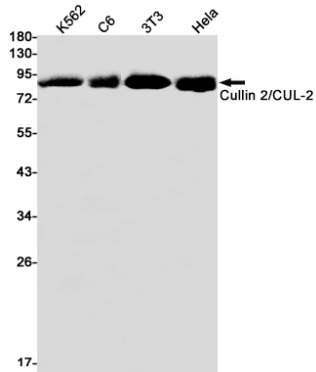
Function Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins (PubMed:[11384984](#), PubMed:[26138980](#), PubMed:[29775578](#), PubMed:[29779948](#), PubMed:[38326650](#)). CUL2 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}.

Images



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