

Cullin 2 Rabbit mAb

Catalog # AP77098

Product Information

Application	WB, IF, FC, ICC, IP
Primary Accession	Q13617
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human Cullin 2
Purification	Affinity Chromatography
Calculated MW	86983

Additional Information

Gene ID	8453
Other Names	CUL2
Dilution	WB~~1/500-1/1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A IP~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

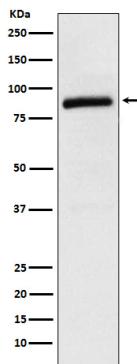
Name	CUL2 (HGNC:2552)
Function	Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins (PubMed: 11384984 , PubMed: 26138980 , PubMed: 29775578 , PubMed: 29779948 , PubMed: 37844242 , 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: 37844242 , 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](#), PubMed:[37844242](#)). 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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