

Recombinant Anti-Cullin 2 Rabbit mAb

Catalog # AP95223

Product Information

Application	WB, FC, IP, IF/IC
Primary Accession	Q13617
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	86983

Additional Information

Gene ID	8453
Other Names	Cullin-2; CUL-2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human Cullin 2 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IP~~N/A IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

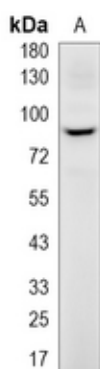
Name	CUL2 (HGNC:2552)
Function	Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins (PubMed:11384984, PubMed:26138980, PubMed:29775578, PubMed:29779948, PubMed:37844242, PubMed:38326650). 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).

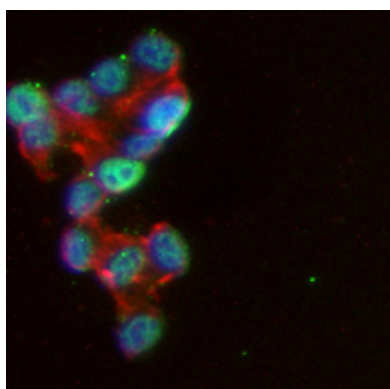
Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

Images



Western blot analysis of Cullin 2 expression in Raji (A) whole cell lysates. (Predicted band size: 87 kD; Observed band size: 87 kD)



Immunofluorescent analysis of Cullin 2 staining in Raji cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.