



## Rabbit Anti-Cullin 4A antibody

SL3642R

<b>Product Name:</b>	Cullin 4A
<b>Chinese Name:</b>	Cullin 4a蛋白抗体
<b>Alias:</b>	CUL 4A; CUL4A; Cul4a protein; MGC36573; MGC64071.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	83kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Cullin 4a:421-520/759
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Cullins assemble a potentially large number of ubiquitin ligases by binding to the RING protein ROC1 to catalyse polyubiquitination, as well as binding to various specificity factors to recruit substrates. Cullin 4a is an essential component of the SCF (SKP1-CUL1-F-box protein) E3 ubiquitin ligase complex, which mediates the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. In the SCF complex, cul4A serves as a rigid scaffold that organizes the SKP1-F-box protein and RBX1 subunits. Cul4A may also contribute to catalysis through positioning of the

substrate and the ubiquitinconjugating enzyme. Cul4A also interacts with RNF7 and is part of a complex with TIP120A/CAND1, Cyclin E and RBX1.

**Function:**

Core component of multiple cullin-RING-based E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. As a scaffold protein 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. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component. DCX(DET1-COP1) directs ubiquitination of JUN. DCX(DDB2) directs ubiquitination of XPC. In association with RBX1, DDB1 and DDB2 is required for histone H3 and histone H4 ubiquitination in response to ultraviolet and may be important for subsequent DNA repair. DCX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 and MDM2-dependent ubiquitination of TP53 in response to radiation-induced DNA damage and during DNA replication. In association with DDB1 and SKP2 probably is involved in ubiquitination of CDKN1B/p27kip. Is involved in ubiquitination of HOXA9.

**Subunit:**

Component of multiple DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complexes that seem to consist of DDB1, CUL4A or CUL4B, RBX1 and a variable substrate recognition component which seems to belong to a protein family described as DCAF (Ddb1- and Cul4-associated factor) or CDW (CUL4-DDB1-associated WD40-repeat) proteins. Component of the CSA complex (DCX(ERCC8) complex) containing ERCC8, RBX1, DDB1 and CUL4A; the CSA complex interacts with RNA polymerase II; upon UV irradiation it interacts with the COP9 signalosome and preferentially with the hyperphosphorylated form of RNA polymerase II. Component of the DCX(DET1-COP1) complex with the substrate recognition component DET1 and COP1. Component of the DCX(DDB2) complex with the substrate recognition component DDB2. Component of the DCX(DTL) complex with the putative substrate recognition component DTL. Interacts with DDB1, RBX1, RNF7, CTD1, TIP120A/CAND1, SKP2, CDKN1B, MDM2, TP53 and HOXA9. Interacts with DDB2; the interactions with DDB2 and CAND1 are mutually exclusive. Interacts with VPRBP, DTL, DDA1, DCAF6, DCAF4, DCAF16, DCAF17, DET1, WDTC1, DCAF5, DCAF11, WDR24A, RFWD2, PAFAH1B1, ERCC8, GRWD1, FBXW5, RBBP7, GNB2, WSB1, WSB2, NUP43, PWP1, FBXW8, ATG16L1, KATNB1, RBBP4, RBBP5 and DCAF8. May interact with WDR26, WDR51B, SNRNP40, WDR61, WDR76, WDR5. Can self-associate. Interacts with Epstein-Barr virus BPLF1.

**Post-translational modifications:**

Neddylated. Deneddylated via its interaction with the COP9 signalosome (CSN) complex (By similarity). Deneddylated by Epstein-Barr virus BPLF1 leading to a S-phase-like environment that is required for efficient replication of the viral genome.

**Similarity:**

Belongs to the cullin family.

**SWISS:**

Q13619

**Gene ID:**

8451

**Database links:**

[Entrez Gene: 8451](#)Human

[Entrez Gene: 99375](#)Mouse

[Omim: 603137](#)Human

[SwissProt: Q13619](#)Human

[SwissProt: Q3TCH7](#)Mouse

[Unigene: 339735](#)Human

[Unigene: 212861](#)Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Cullin蛋白参与许多细胞功能的降解过程, 包括细胞是否成长为成熟细胞、分裂或遭受凋亡的蛋白。cullin 4A主要调控血细胞。