

Cullin4A Antibody
Rabbit mAb
Catalog # AP91856**Specification**

Cullin4A Antibody - Product Information

Application	WB, IHC, FC, ICC, IP
Primary Accession	Q13619
Clonality	Monoclonal
Other Names	
Cul4a; Cullin-4A;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	87680 Da

Cullin4A Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Cullin4A
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Cullin4A Antibody - Protein Information

Name CUL4A {ECO:0000303|PubMed:9721878, ECO:0000312|HGNC:HGNC:2554}

Function

Core component of multiple cullin-RING-based E3 ubiquitin- protein ligase complexes which mediate the ubiquitination of target proteins (PubMed:14578910, PubMed:<a

[14739464](http://www.uniprot.org/citations/14739464) PubMed: [15448697](http://www.uniprot.org/citations/15448697) PubMed: [15548678](http://www.uniprot.org/citations/15548678) PubMed: [15811626](http://www.uniprot.org/citations/15811626) PubMed: [16678110](http://www.uniprot.org/citations/16678110) PubMed: [17041588](http://www.uniprot.org/citations/17041588) PubMed: [24209620](http://www.uniprot.org/citations/24209620) PubMed: [30166453](http://www.uniprot.org/citations/30166453) PubMed: [33854232](http://www.uniprot.org/citations/33854232) PubMed: [33854239](http://www.uniprot.org/citations/33854239)). As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed: [14578910](http://www.uniprot.org/citations/14578910) target="_blank">14578910 PubMed: [14739464](http://www.uniprot.org/citations/14739464) target="_blank">14739464 PubMed: [15448697](http://www.uniprot.org/citations/15448697) target="_blank">15448697 PubMed: [15548678](http://www.uniprot.org/citations/15548678) target="_blank">15548678 PubMed: [15811626](http://www.uniprot.org/citations/15811626) target="_blank">15811626 PubMed: [16678110](http://www.uniprot.org/citations/16678110) target="_blank">16678110 PubMed: [17041588](http://www.uniprot.org/citations/17041588) target="_blank">17041588 PubMed: [24209620](http://www.uniprot.org/citations/24209620) target="_blank">24209620). 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: [14578910](http://www.uniprot.org/citations/14578910) target="_blank">14578910 PubMed: [14739464](http://www.uniprot.org/citations/14739464) target="_blank">14739464 PubMed: [15448697](http://www.uniprot.org/citations/15448697) target="_blank">15448697 PubMed: [15548678](http://www.uniprot.org/citations/15548678) target="_blank">15548678 PubMed: [15811626](http://www.uniprot.org/citations/15811626) target="_blank">15811626 PubMed: [16678110](http://www.uniprot.org/citations/16678110) target="_blank">16678110 PubMed: [17041588](http://www.uniprot.org/citations/17041588) target="_blank">17041588 PubMed: [24209620](http://www.uniprot.org/citations/24209620) target="_blank">24209620). The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component (PubMed: [14578910](http://www.uniprot.org/citations/14578910) target="_blank">14578910 PubMed: [14739464](http://www.uniprot.org/citations/14739464) target="_blank">14739464 PubMed: [15448697](http://www.uniprot.org/citations/15448697) target="_blank">15448697 PubMed: [15548678](http://www.uniprot.org/citations/15548678) target="_blank">15548678 PubMed: [15811626](http://www.uniprot.org/citations/15811626) target="_blank">15811626 PubMed: [16678110](http://www.uniprot.org/citations/16678110) target="_blank">16678110 PubMed: [17041588](http://www.uniprot.org/citations/17041588) target="_blank">17041588 PubMed: [24209620](http://www.uniprot.org/citations/24209620) target="_blank">24209620). DCX(DET1-COP1) directs ubiquitination of JUN (PubMed: [14739464](http://www.uniprot.org/citations/14739464) target="_blank">14739464). DCX(DDB2) directs ubiquitination of XPC (PubMed: [15811626](http://www.uniprot.org/citations/15811626) target="_blank">15811626). DCX(DDB2) ubiquitinates histones H3-H4 and is required for efficient histone deposition during replication-coupled (H3.1) and replication-independent (H3.3) nucleosome assembly, probably by facilitating the transfer of H3 from ASF1A/ASF1B to other chaperones involved in histone deposition (PubMed: [16678110](http://www.uniprot.org/citations/16678110) target="_blank">16678110 PubMed: [17041588](http://www.uniprot.org/citations/17041588) target="_blank">17041588 PubMed: [24209620](http://www.uniprot.org/citations/24209620) target="_blank">24209620). DCX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 and MDM2-dependent ubiquitination of p53/TP53 in response to radiation-induced DNA damage and during DNA replication (PubMed: [14578910](http://www.uniprot.org/citations/14578910) target="_blank">14578910 PubMed: [15448697](http://www.uniprot.org/citations/15448697) target="_blank">15448697 PubMed: [15548678](http://www.uniprot.org/citations/15548678) target="_blank">15548678). DCX(DTL) directs autoubiquitination of DTL (PubMed: [23478445](http://www.uniprot.org/citations/23478445) target="_blank">23478445). In association with DDB1 and SKP2 probably is involved in ubiquitination of CDKN1B/p27kip (PubMed: [16537899](http://www.uniprot.org/citations/16537899)

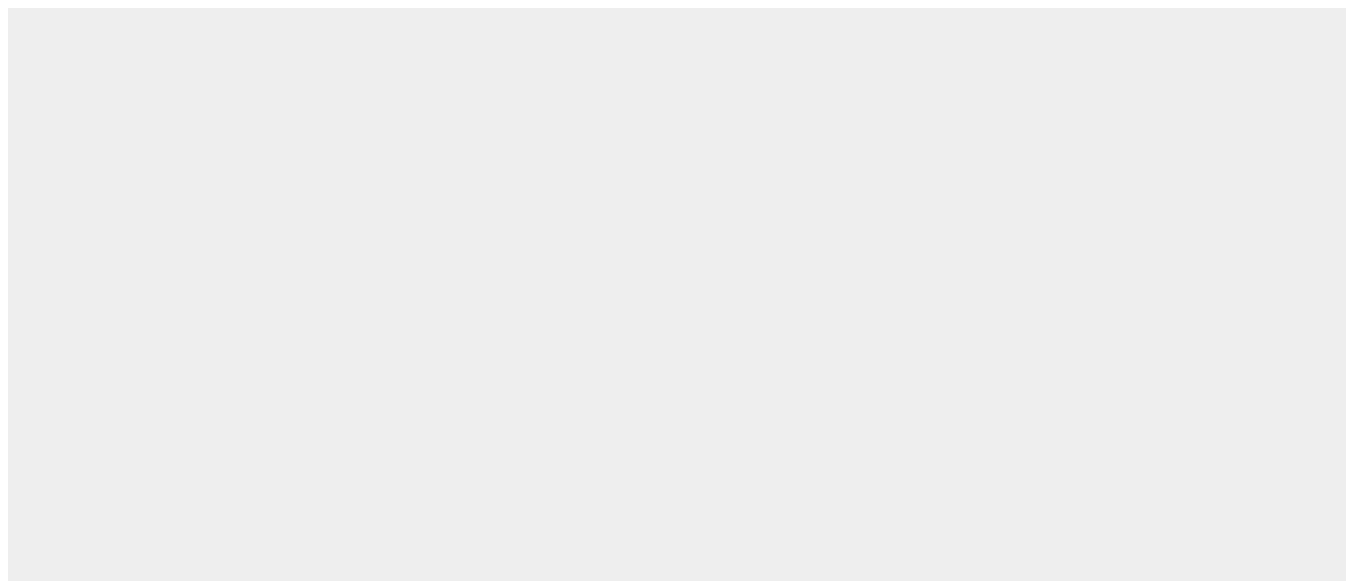
target="_blank">16537899). Is involved in ubiquitination of HOXA9 (PubMed:14609952). The DDB1-CUL4A- DTL E3 ligase complex regulates the circadian clock function by mediating the ubiquitination and degradation of CRY1 (PubMed:26431207). The DCX(ERCC8) complex (also named CSA complex) plays a role in transcription-coupled repair (TCR) (PubMed:12732143, PubMed:32355176, PubMed:38316879). A number of DCX complexes (containing either TRPC4AP or DCAF12 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:29779948). The DCX(AMBRA1) complex is a master regulator of the transition from G1 to S cell phase by mediating ubiquitination of phosphorylated cyclin-D (CCND1, CCND2 and CCND3) (PubMed:33854232, PubMed:33854239). The DCX(AMBRA1) complex also acts as a regulator of Cul5-RING (CRL5) E3 ubiquitin-protein ligase complexes by mediating ubiquitination and degradation of Elongin-C (ELOC) component of CRL5 complexes (PubMed:30166453). With CUL4B, contributes to ribosome biogenesis (PubMed:26711351).

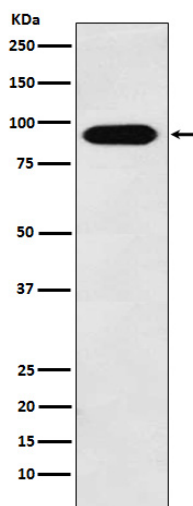
Cullin4A Antibody - Protocols

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](#)

Cullin4A Antibody - Images





Western blot analysis of Cullin 4a expression in HeLa cell lysate.