

**Anti-Cullin 4A / CUL4A Antibody**  
**Rabbit Anti Human Polyclonal Antibody**  
**Catalog # ALS18167**

### Specification

#### Anti-Cullin 4A / CUL4A Antibody - Product Information

Application	WB, IHC-P
Primary Accession	<a href="#">Q13619</a>
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	87680

#### Anti-Cullin 4A / CUL4A Antibody - Additional Information

##### Gene ID 8451

Alias Symbol **CUL4A**  
**Other Names**  
CUL4A, CUL-4A, Cullin-4A, Cullin 4A

**Target/Specificity**  
Human Cullin 4A / CUL4A

**Reconstitution & Storage**  
Affinity purified

##### Precautions

Anti-Cullin 4A / CUL4A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Anti-Cullin 4A / CUL4A 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:<a href="http://www.uniprot.org/citations/14578910" target="\_blank">14578910</a>, PubMed:<a href="http://www.uniprot.org/citations/15811626" target="\_blank">15811626</a>, PubMed:<a href="http://www.uniprot.org/citations/15548678" target="\_blank">15548678</a>, PubMed:<a href="http://www.uniprot.org/citations/15448697" target="\_blank">15448697</a>, PubMed:<a href="http://www.uniprot.org/citations/14739464" target="\_blank">14739464</a>, PubMed:<a href="http://www.uniprot.org/citations/16678110" target="\_blank">16678110</a>, PubMed:<a href="http://www.uniprot.org/citations/17041588" target="\_blank">17041588</a>, PubMed:<a href="http://www.uniprot.org/citations/24209620" target="\_blank">24209620</a>, PubMed:<a href="http://www.uniprot.org/citations/30166453" target="\_blank">30166453</a>, PubMed:<a

href="http://www.uniprot.org/citations/33854232" target="\_blank">>33854232</a>, PubMed:<a href="http://www.uniprot.org/citations/33854239" target="\_blank">>33854239</a>). As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed:<a href="http://www.uniprot.org/citations/14578910" target="\_blank">>14578910</a>, PubMed:<a href="http://www.uniprot.org/citations/15811626" target="\_blank">>15811626</a>, PubMed:<a href="http://www.uniprot.org/citations/15548678" target="\_blank">>15548678</a>, PubMed:<a href="http://www.uniprot.org/citations/15448697" target="\_blank">>15448697</a>, PubMed:<a href="http://www.uniprot.org/citations/14739464" target="\_blank">>14739464</a>, PubMed:<a href="http://www.uniprot.org/citations/16678110" target="\_blank">>16678110</a>, PubMed:<a href="http://www.uniprot.org/citations/17041588" target="\_blank">>17041588</a>, PubMed:<a href="http://www.uniprot.org/citations/24209620" target="\_blank">>24209620</a>). 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:<a href="http://www.uniprot.org/citations/14578910" target="\_blank">>14578910</a>, PubMed:<a href="http://www.uniprot.org/citations/15811626" target="\_blank">>15811626</a>, PubMed:<a href="http://www.uniprot.org/citations/15548678" target="\_blank">>15548678</a>, PubMed:<a href="http://www.uniprot.org/citations/15448697" target="\_blank">>15448697</a>, PubMed:<a href="http://www.uniprot.org/citations/14739464" target="\_blank">>14739464</a>, PubMed:<a href="http://www.uniprot.org/citations/16678110" target="\_blank">>16678110</a>, PubMed:<a href="http://www.uniprot.org/citations/17041588" target="\_blank">>17041588</a>, PubMed:<a href="http://www.uniprot.org/citations/24209620" target="\_blank">>24209620</a>). The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component (PubMed:<a href="http://www.uniprot.org/citations/14578910" target="\_blank">>14578910</a>, PubMed:<a href="http://www.uniprot.org/citations/15811626" target="\_blank">>15811626</a>, PubMed:<a href="http://www.uniprot.org/citations/15548678" target="\_blank">>15548678</a>, PubMed:<a href="http://www.uniprot.org/citations/15448697" target="\_blank">>15448697</a>, PubMed:<a href="http://www.uniprot.org/citations/14739464" target="\_blank">>14739464</a>, PubMed:<a href="http://www.uniprot.org/citations/16678110" target="\_blank">>16678110</a>, PubMed:<a href="http://www.uniprot.org/citations/17041588" target="\_blank">>17041588</a>, PubMed:<a href="http://www.uniprot.org/citations/24209620" target="\_blank">>24209620</a>). DCX(DET1-COP1) directs ubiquitination of JUN (PubMed:<a href="http://www.uniprot.org/citations/14739464" target="\_blank">>14739464</a>). DCX(DDB2) directs ubiquitination of XPC (PubMed:<a href="http://www.uniprot.org/citations/15811626" target="\_blank">>15811626</a>). 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:<a href="http://www.uniprot.org/citations/16678110" target="\_blank">>16678110</a>, PubMed:<a href="http://www.uniprot.org/citations/17041588" target="\_blank">>17041588</a>, PubMed:<a href="http://www.uniprot.org/citations/24209620" target="\_blank">>24209620</a>). 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:<a href="http://www.uniprot.org/citations/14578910" target="\_blank">>14578910</a>, PubMed:<a href="http://www.uniprot.org/citations/15548678" target="\_blank">>15548678</a>, PubMed:<a href="http://www.uniprot.org/citations/15448697" target="\_blank">>15448697</a>). DCX(DTL) directs autoubiquitination of DTL (PubMed:<a href="http://www.uniprot.org/citations/23478445" target="\_blank">>23478445</a>). In association with DDB1 and SKP2 probably is involved in ubiquitination of CDKN1B/p27kip (PubMed:<a href="http://www.uniprot.org/citations/16537899" target="\_blank">>16537899</a>). Is involved in ubiquitination of HOXA9 (PubMed:<a href="http://www.uniprot.org/citations/14609952" target="\_blank">>14609952</a>). The DDB1-CUL4A-DTL E3 ligase complex regulates the circadian clock function by mediating the ubiquitination and degradation of CRY1 (PubMed:<a href="http://www.uniprot.org/citations/26431207" target="\_blank">>26431207</a>). 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:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>). 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:<a href="http://www.uniprot.org/citations/33854232" target="\_blank">33854232</a>, PubMed:<a href="http://www.uniprot.org/citations/33854239" target="\_blank">33854239</a>). 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:<a href="http://www.uniprot.org/citations/30166453" target="\_blank">30166453</a>). With CUL4B, contributes to ribosome biogenesis (PubMed:<a href="http://www.uniprot.org/citations/26711351" target="\_blank">26711351</a>).

### **Anti-Cullin 4A / CUL4A 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](#)

### **Anti-Cullin 4A / CUL4A Antibody - Images**