

# CUL4A Antibody



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<b>Applications:</b> W, IP	<b>Reactivity:</b> H Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 80, 82	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q13619	<b>Entrez-Gene Id:</b> 8451
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## Product Usage Information

### Application

Western Blotting  
Immunoprecipitation

### Dilution

1:1000  
1:50

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

CUL4A Antibody detects endogenous levels of total human CUL4A protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding residues surrounding Ser12 of human CUL4A. Antibodies are purified by peptide affinity chromatography.

## Background

Cullin-4 (CUL4) is a member of the cullin family of related ubiquitin ligases (1). A pair of mammalian CUL4 proteins have been identified: CUL4A and CUL4B. The carboxy-terminal CUL4 domain interacts with Rbx1 and E2 enzymes, while the amino-terminal CUL4 domain interacts with the BPB domain of UV-damaged DNA-binding protein DDB1 to form a CUL4-DDB1 ubiquitin ligase complex (2). This CUL4-DDB1 complex binds a variety of WD40-containing proteins that help to enhance additional substrate recruitment (2,3). The CUL4 complex has been shown to target substrates involved in DNA repair, cell cycle progression (2), transcription (3), and development (2-6).

## Background References

1. Petroski, M.D. and Deshaies, R.J. (2005) *Nat Rev Mol Cell Biol* 6, 9-20.
2. Lee, J. and Zhou, P. (2007) *Mol Cell* 26, 775-80.
3. Higa, L.A. and Zhang, H. (2007) *Cell Div* 2, 5.
4. Ghosh, P. et al. (2008) *Cell Cycle* 7, 373-81.
5. Ohtake, F. et al. (2007) *Nature* 446, 562-6.
6. Shiyonov, P. et al. (1999) *J Biol Chem* 274, 35309-12.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting **IP:** Immunoprecipitation

## Cross-Reactivity Key

**H:** Human **Mk:** Monkey

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