

#2699 Store at -20°C

CUL4A Antibody



100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #8451
Swiss-Prot Acc. #Q13619

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H, Mk	80, 82 kDa	Rabbit**

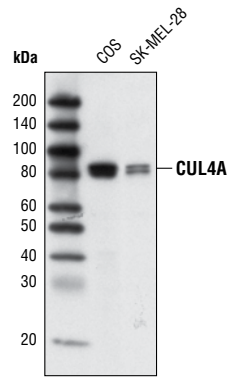
Background: Cullin-4 (CUL4) is a member of the cullin family of related ubiquitin ligases (1). A pair of mammalian CUL4 proteins - CUL4A and CUL4B - has been identified. The carboxy-terminal domain of CUL4 interacts with Rbx1 and E2 enzyme while the amino-terminal CUL4 domain interacts with BPB domain 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).

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 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.



Western blot analysis of extracts from human COS and SKMEL-28 cell lines using CUL4A Antibody.

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.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000
Immunoprecipitation 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.