

# CUL-4A (P-22): sc-130732

## BACKGROUND

CUL-4A is a member of the cullin family of proteins that is involved in the ubiquitin-mediated degradation of cell cycle regulators. CUL-4A regulates cell cycle progression during differentiation, and overexpression of this protein significantly increases the number of cells in S phase and reduces the number that accumulate in G<sub>0</sub>/G<sub>1</sub> phase. CUL-4A localizes to the cytoplasm where it stimulates ubiquitylation and degradation of the HoxA9 homeodomain protein, a key regulator of hematopoiesis and embryonic development. CUL-4A also stimulates the degradation of the damaged DNA-binding protein (DDB) that plays a role in DNA repair and is involved in the repair deficiency disease xeroderma pigmentosum. The CUL-4A gene is amplified and overexpressed in breast cancer, implicating the protein in tumorigenesis and/or tumor progression.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CUL4A (human) mapping to 13q34.

## SOURCE

CUL-4A (P-22) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of CUL-4A of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

CUL-4A (P-22) is recommended for detection of CUL-4A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CUL-4A siRNA (h): sc-44355, CUL-4A shRNA Plasmid (h): sc-44355-SH and CUL-4A shRNA (h) Lentiviral Particles: sc-44355-V.

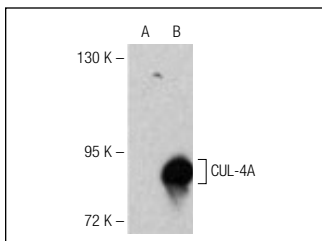
Molecular Weight of CUL-4A: 88 kDa.

Positive Controls: human CUL-4A transfected 293 whole cell lysate.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



CUL-4A (P-22): sc-130732. Western blot analysis of CUL-4A expression in non-transfected (A) and human CUL-4A transfected (B) 293 whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CUL-4 (H-11): sc-377188**, our highly recommended monoclonal alternative to CUL-4A (P-22).