SANTA CRUZ BIOTECHNOLOGY, INC.

CUL-4A (E-14): sc-50917

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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_0/G_1 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; Cul4a (mouse) mapping to 8 A1.1.

SOURCE

CUL-4A (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CUL-4A of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50917 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CUL-4A (E-14) is recommended for detection of CUL-4A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CUL-4A (E-14) is also recommended for detection of CUL-4A in additional species, including equine.

Suitable for use as control antibody for CUL-4A siRNA (h): sc-44355, CUL-4A siRNA (m): sc-60470, CUL-4A shRNA Plasmid (h): sc-44355-SH, CUL-4A shRNA Plasmid (m): sc-60470-SH, CUL-4A shRNA (h) Lentiviral Particles: sc-44355-V and CUL-4A shRNA (m) Lentiviral Particles: sc-60470-V.

Molecular Weight of CUL-4A: 88 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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