SANTA CRUZ BIOTECHNOLOGY, INC.

cylindromatosis 1 (H-6): sc-137139

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Familial cylindromatosis is an autosomal dominant genetic predisposition to multiple benign neoplasms of the skin known as cylindromas. These cylindromas may become infected, resulting in disfigurement and discomfort. In severe cases, ulcerated cylindromas are only treatable by reconstructive surgery with skin grafts. The human CYLD gene on chromosome 16q12.1 encodes the protein cylindromatosis 1. Mutations in this gene are responsible for familial cylindromatosis. The cylindromatosis 1 protein contains three cytoskeletal-associated protein-glycineconserved (CAP-GLY) domains and may function to coordinate the attachment of organelles to microtubules. Cylindromatosis 1 is expressed in brain, gonads, skeletal muscle, spleen, liver, heart, lung and leukocytes. Somatic mutations of the CYLD gene appear to play a role in the oncogenesis of tumors with cylindromatous features.

CHROMOSOMAL LOCATION

Genetic locus: CYLD (human) mapping to 16q12.1; Cyld (mouse) mapping to 8 C3.

SOURCE

cylindromatosis 1 (H-6) is a mouse monoclonal antibody raised against the C-terminal 419 amino acids of cylindromatosis 1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

cylindromatosis 1 (H-6) is available conjugated to agarose (sc-137139 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137139 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-137139 PE), fluorescein (sc-137139 FITC), Alexa Fluor® 488 (sc-137139 AF488), Alexa Fluor® 546 (sc-137139 AF546), Alexa Fluor® 594 (sc-137139 AF594) or Alexa Fluor® 647 (sc-137139 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-137139 AF680) or Alexa Fluor® 790 (sc-137139 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

cylindromatosis 1 (H-6) is recommended for detection of cylindromatosis 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for cylindromatosis 1 siRNA (h): sc-37326, cylindromatosis 1 siRNA (m): sc-37327, cylindromatosis 1 shRNA Plasmid (h): sc-37326-SH, cylindromatosis 1 shRNA Plasmid (m): sc-37327-SH, cylindromatosis 1 shRNA (h) Lentiviral Particles: sc-37326-V and cylindromatosis 1 shRNA (m) Lentiviral Particles: sc-37327-V.

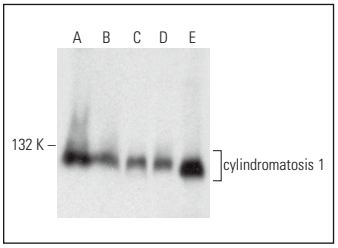
Molecular Weight of cylindromatosis 1: 120 kDa.

Positive Controls: cylindromatosis 1 (m): 293T Lysate: sc-119562, mouse brain extract: sc-2253 or Jurkat whole cell lysate: sc-2204.

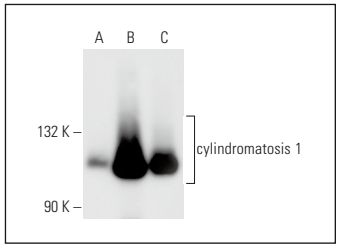
STORAGE

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

DATA



cylindromatosis 1 (H-6): SC-137139. Western blot analysis of cylindromatosis 1 expression in MIA PaCa-2 (**A**), Jurkat (**B**), HeLa (**C**) and A-431 (**D**) whole cell lysates and mouse brain tissue extract (**E**).



cylindromatosis 1 (H-6): sc-137139. Western blot analysis of cylindromatosis 1 expression in non-transfected 293T: sc-117752 (**A**), mouse cylindromatosis 1 transfected 293T: sc-119562 (**B**) and Jurkat (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

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2. Douanne, T., et al. 2016. The paracaspase MALT1 cleaves the LUBAC subunit HOIL1 during antigen receptor signaling. J. Cell Sci. 129: 1775-1780.
3. Sanchez-Quiles, V., et al. 2017. Cylindromatosis tumor suppressor protein (CYLD) deubiquitinase is necessary for proper ubiquitination and degradation of the epidermal growth factor receptor. Mol. Cell. Proteomics 16: 1433-1446.
4. Douanne, T., et al. 2019. CYLD regulates centriolar satellites proteostasis by counteracting the E3 ligase MIB1. Cell Rep. 27: 1657-1665.e4.
5. Jacobs, K.A., et al. 2020. Paracaspase MALT1 regulates glioma cell survival by controlling endo-lysosome homeostasis. EMBO J. 39: e102030.
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7. Zhu, G., et al. 2021. TRIM15 and CYLD regulate ERK activation via lysine-63-linked polyubiquitination. Nat. Cell Biol. 23: 978-991.
8. Thys, A., et al. 2021. Serine 165 phosphorylation of SHARPIN regulates the activation of NFκB. iScience 24: 101939.
9. Li, M., et al. 2022. Reciprocal interplay between OTULIN-LUBAC determines genotoxic and inflammatory NFκB signal responses. Proc. Natl. Acad. Sci. USA 119: e2123097119.
10. Ren, Y., et al. 2022. Inhibition of deubiquitinase USP28 attenuates cyst growth in autosomal dominant polycystic kidney disease. Biochem. Pharmacol. 207: 115355.
11. Renaud, C.C.N., et al. 2023. The centrosomal protein 131 participates in the regulation of mitochondrial apoptosis. Commun. Biol. 6: 1271.

RESEARCH USE

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