SANTA CRUZ BIOTECHNOLOGY, INC.

cylindromatosis 1 (E-10): sc-74435

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 (E-10) 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_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

cylindromatosis 1 (E-10) is available conjugated to agarose (sc-74435 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74435 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74435 PE), fluorescein (sc-74435 FITC), Alexa Fluor® 488 (sc-74435 AF488), Alexa Fluor® 546 (sc-74435 AF546), Alexa Fluor® 594 (sc-74435 AF594) or Alexa Fluor® 647 (sc-74435 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-74435 AF680) or Alexa Fluor® 790 (sc-74435 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

cylindromatosis 1 (E-10) 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.

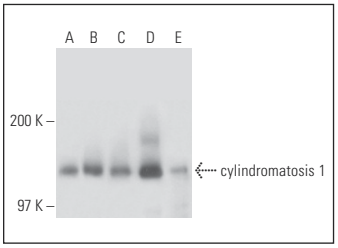
Molecular Weight of cylindromatosis 1: 120 kDa.

Positive Controls: cylindromatosis 1 (m): 293T Lysate: sc-119562, Jurkat whole cell lysate: sc-2204 or A-431 whole cell lysate: sc-2201.

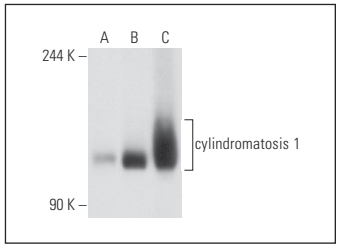
STORAGE

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

DATA



cylindromatosis 1 (E-10): sc-74435. Western blot analysis of cylindromatosis 1 expression in Jurkat (**A**), A-431 (**B**), MIA PaCa-2 (**C**), NIH/3T3 (**D**) and KNRK (**E**) whole cell lysates.



cylindromatosis 1 (E-10): sc-74435. 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

1. Vanlangenakker, N., et al. 2011. cIAP1 and TAK1 protect cells from TNF-induced necrosis by preventing RIP1/RIP3-dependent reactive oxygen species production. Cell Death Differ. 18: 656-665.
2. Jung, S.M., et al. 2013. Smad6 inhibits non-canonical TGF-β1 signalling by recruiting the deubiquitinase A20 to TRAF6. Nat. Commun. 4: 2562.
3. Baens, M., et al. 2014. MALT1 auto-proteolysis is essential for NFκB-dependent gene transcription in activated lymphocytes. PLoS ONE 9: e103774.
4. Elton, L., et al. 2015. MALT1 cleaves the E3 ubiquitin ligase HOIL-1 in activated T cells, generating a dominant negative inhibitor of LUBAC-induced NFκB signaling. FEBS J. 283: 403-412.
5. Lee, B.C., et al. 2016. Deubiquitinase CYLD acts as a negative regulator for bacterium NTHi-induced inflammation by suppressing K63-linked ubiquitination of MyD88. Proc. Natl. Acad. Sci. USA 113: E165-E171.
6. Guo, X., et al. 2016. TAK1 regulates caspase 8 activation and necroptotic signaling via multiple cell death checkpoints. Cell Death Dis. 7: e2381.
7. Afonina, I.S., et al. 2016. The paracaspase MALT1 mediates CARD14-induced signaling in keratinocytes. EMBO Rep. 17: 914-927.
8. Damgaard, R.B., et al. 2016. The deubiquitinase OTULIN Is an essential negative regulator of inflammation and autoimmunity. Cell 166: 1215-1230.
9. Lafont, E., et al. 2017. The linear ubiquitin chain assembly complex regulates TRAIL-induced gene activation and cell death. EMBO J. 36: 1147-1166.

RESEARCH USE

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