SANTA CRUZ BIOTECHNOLOGY, INC.

cylindromatosis 1 (H-419): sc-25779

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 cyld1 gene on chromosome 16q12.1 encodes the protein cylindromatosis 1. Mutations in the cyld1 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 cyld1 gene appear to play a role in the oncogenesis of tumors with cylindromatous features.

REFERENCES

1. Biggs, P.J., et al. 1995. Familial cylindromatosis (turban tumour syndrome) gene localized to chromosome 16q12-q13: evidence for its role as a tumour suppressor gene. Nat. Genet. 11: 441-443.
2. Biggs, P.J., et al. 1996. The cylindromatosis gene (cyld1) on chromosome 16q may be the only tumour suppressor gene involved in the development of cylindromas. Oncogene 12: 1375-1377.
3. Verhoef, S., et al. 1998. Familial cylindromatosis mimicking tuberous sclerosis complex and confirmation of the cylindromatosis locus, CYLD1, in a large family. J. Med. Genet. 35: 841-845.
4. Thomson, S.A., et al. 1999. A new hereditary cylindromatosis family associated with CYLD1 on chromosome 16. Hum. Genet. 105: 171-173.
5. Bignell, G.R., et al. 2000. Identification of the familial cylindromatosis tumour-suppressor gene. Nat. Genet. 25: 160-165.
6. Leonard, N., et al. 2001. Loss of heterozygosity at cylindromatosis gene locus, CYLD, in sporadic skin adnexal tumours. J. Clin. Pathol. 54: 689-692.

CHROMOSOMAL LOCATION

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

SOURCE

cylindromatosis 1 (H-419) is a rabbit polyclonal antibody raised against amino acids 537-956 mapping at the C-terminus of cylindromatosis 1 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.

STORAGE

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

APPLICATIONS

cylindromatosis 1 (H-419) is recommended for detection of cylindromatosis 1 of mouse, rat and 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)], 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).

cylindromatosis 1 (H-419) is also recommended for detection of cylindromatosis 1 in additional species, including equine, canine, bovine and avian.

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: Jurkat whole cell lysate: sc-2204, A-431 whole cell lysate: sc-2201 or MIA PaCa-2 cell lysate: sc-2285.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Wang, L., et al. 2005. The BRG1- and hBRM-associated factor BAF57 induces apoptosis by stimulating expression of the cylindromatosis tumor suppressor gene. Mol. Cell. Biol. 25: 7953-7965.
2. Takami, Y., et al. 2008. Potential role of CYLD (cylindromatosis) as a deubiquitinating enzyme in vascular cells. Am. J. Pathol. 172: 818-829.
3. Cui, T.G., et al. 2009. An emerging role of deubiquitinating enzyme cylindromatosis (CYLD) in the tubulointerstitial inflammation of IgA nephropathy. Biochem. Biophys. Res. Commun. 390: 307-312.
4. Sun, F., et al. 2009. Tumor suppressor cylindromatosis: expressed in IgA nephropathy and negatively associated with renal tubulo-interstitial lesion. Chin. Med. J. 122: 2603-2607.
5. Into, T., et al. 2010. Regulation of MyD88 aggregation and the MyD88-dependent signaling pathway by sequestosome 1 and histone deacetylase 6. J. Biol. Chem. 285: 35759-35769.

RESEARCH USE

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