SANTA CRUZ BIOTECHNOLOGY, INC.

cylindromatosis 1 (N-16): sc-21286



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 cytoskeletalassociated 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.

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.
- 7. Strobel, P., et al. 2002. Spiradenocylindroma of the kidney: clinical and genetic findings suggesting a role of somatic mutation of the CYLD1 gene in the oncogenesis of an unusual renal neoplasm. Am. J. Surg. Pathol. 26: 119-124.

CHROMOSOMAL LOCATION

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

SOURCE

cylindromatosis 1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of cylindromatosis 1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-21286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cylindromatosis 1 (N-16) 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), 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 (N-16) is also recommended for detection of cylindromatosis 1 in additional species, including equine, canine and bovine.

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: mouse brain extract: sc-2253, mouse lung extract: sc-2390 or rat lung extract: sc-2396.

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, **D0 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.