SANTA CRUZ BIOTECHNOLOGY, INC.

CLLD6 (A-6): sc-514533

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CLLD6 (chronic lymphocytic leukemia deletion region gene 6 protein), also known as SPRYD7 (SPRY domain-containing protein 7) or C13orf1, is a 196 amino acid protein that contains one B30.2/SPRY domain. Expression of CLLD6 is found at highest levels in heart, skeletal muscle and testis, with lower levels found in thymus, peripheral blood leukocytes, lymph node and bone marrow. Existing as 2 alternatively spliced isoforms, CLLD6 maps to human chromosome 13, which comprises nearly 4% of human DNA and contains about 114 million base pairs and 400 genes. Key tumor suppressor genes on chromosome 13 include the breast cancer susceptibility gene, BRCA2, and the RB1 (retinoblastoma) gene. RB1 encodes a crucial tumor suppressor protein which, when defective, leads to malignant growth in the retina and has been implicated in a variety of other cancers. The gene SLITRK1, which is associated with Tourette syndrome, is on chromosome 13. As with most chromosomes, polysomy of part or all of chromosome 13 is deleterious to development and decreases the odds of survival.

REFERENCES

1. Mabuchi, H., et al. 2001. Cloning and characterization of CLLD6, CLLD7, and CLLD8, novel candidate genes for leukemogenesis at chromosome 13q14, a region commonly deleted in B-cell chronic lymphocytic leukemia. Cancer Res. 61: 2870-2877.
2. Deng, H., et al. 2006. Examination of the SLITRK1 gene in Caucasian patients with Tourette syndrome. Acta Neurol. Scand. 114: 400-402.
3. Hsu, H.F. and Hou, J.W. 2007. Variable expressivity in Patau syndrome is not all related to trisomy 13 mosaicism. Am. J. Med. Genet. A 143A: 1739-1748.
4. Hall, H.E., et al. 2007. The origin of trisomy 13. Am. J. Med. Genet. A 143A: 2242-2248.

CHROMOSOMAL LOCATION

Genetic locus: SPRYD7 (human) mapping to 13q14.2; Spryd7 (mouse) mapping to 14 D1.

SOURCE

CLLD6 (A-6) is a mouse monoclonal antibody raised against amino acids 1-196 representing full length CLLD6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CLLD6 (A-6) is available conjugated to agarose (sc-514533 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514533 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514533 PE), fluorescein (sc-514533 FITC), Alexa Fluor® 488 (sc-514533 AF488), Alexa Fluor® 546 (sc-514533 AF546), Alexa Fluor® 594 (sc-514533 AF594) or Alexa Fluor® 647 (sc-514533 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514533 AF680) or Alexa Fluor® 790 (sc-514533 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CLLD6 (A-6) is recommended for detection of CLLD6 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 CLLD6 siRNA (h): sc-105215, CLLD6 siRNA (m): sc-142395, CLLD6 shRNA Plasmid (h): sc-105215-SH, CLLD6 shRNA Plasmid (m): sc-142395-SH, CLLD6 shRNA (h) Lentiviral Particles: sc-105215-V and CLLD6 shRNA (m) Lentiviral Particles: sc-142395-V.

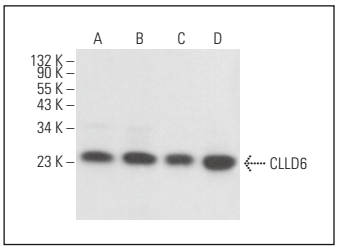
Molecular Weight of CLLD6: 22 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, PC-12 cell lysate: sc-2250 or T98G cell lysate: sc-2294.

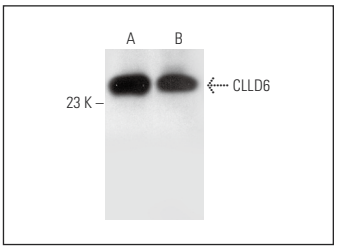
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CLLD6 (A-6): sc-514533. Western blot analysis of CLLD6 expression in SW480 (**A**), Neuro-2A (**B**), RAW 264.7 (**C**) and NIH/3T3 (**D**) whole cell lysates.



CLLD6 (A-6): sc-514533. Western blot analysis of CLLD6 expression in PC-12 (**A**) and T98G (**B**) whole cell lysates.

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.

PROTOCOLS

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