SANTA CRUZ BIOTECHNOLOGY, INC.

DEPDC1B (L-16): sc-246439



BACKGROUND

DEPDC1B (DEP domain-containing protein1B), also known as XTP8 or HBV Xag-transactivated protein 9, is a 529 amino acid protein containing one DEP domain and a Rho-GAP domain. DEPDC1B is encoded by a gene located on human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- 1. Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
- Saltman, D.L., et al. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. Genomics 16: 726-732.
- Johannsdottir, H.K., et al. 2006. Chromosome 5 imbalance mapping in breast tumors from BRCA1 and BRCA2 mutation carriers and sporadic breast tumors. Int. J. Cancer 119: 1052-1060.
- 4. Lu, G., et al. 2006. Cloning and characterization of the annexin II receptor on human marrow stromal cells. J. Biol. Chem. 281: 30542-30550.
- 5. South, S.T., et al. 2006. A new genomic mechanism leading to cri-du-chat syndrome. Am. J. Med. Genet. A 140A: 2714-2720.
- Cleaver, J.E., et al. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcriptioncoupled repair. Neuroscience 145: 1300-1308.
- 7. Du, H.Y., et al. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p-syndrome. Aging Cell 6: 689-697.
- Kanehira, M., et al. 2007. Involvement of upregulation of DEPDC1 (DEP domain containing 1) in bladder carcinogenesis. Oncogene 26: 6448-6455.
- Niu, N., et al. 2010. Radiation pharmacogenomics: a genome-wide association approach to identify radiation response biomarkers using human lymphoblastoid cell lines. Genome Res. 20: 1482-1492.

CHROMOSOMAL LOCATION

Genetic locus: DEPDC1B (human) mapping to 5q12.1; Depdc1b (mouse) mapping to 13 D2.1.

SOURCE

DEPDC1B (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DEPDC1B of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-246439 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DEPDC1B (L-16) is recommended for detection of DEPDC1B 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); non cross-reactive with DEPDC1.

DEPDC1B (L-16) is also recommended for detection of DEPDC1B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DEPDC1B siRNA (h): sc-91972, DEPDC1B siRNA (m): sc-143007, DEPDC1B shRNA Plasmid (h): sc-91972-SH, DEPDC1B shRNA Plasmid (m): sc-143007-SH, DEPDC1B shRNA (h) Lentiviral Particles: sc-91972-V and DEPDC1B shRNA (m) Lentiviral Particles: sc-143007-V.

Molecular Weight of DEPDC1B: 62 kDa.

Positive Controls: mouse brain extract: sc-2253 or RAW 264.7 whole cell lysate: sc-2211.

DATA





DEPDC1B (L-16): sc-246439. Western blot analysis of DEPDC1B expression in RAW 264.7 whole cell lysate.

DEPDC1B (L-16): sc-246439. Western blot analysis of DEPDC1B expression in mouse brain tissue extract.

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

PROTOCOLS

STORAGE

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