

DLEU7 (A-16): sc-84084

BACKGROUND

DLEU7 (deleted in lymphocytic leukemia, 7), also known as LEU7, is a 221 amino acid ubiquitously expressed protein that exists as multiple alternatively spliced isoforms and is encoded by a gene which maps to a tumor suppressor region on human chromosome 13. Comprising nearly 4% of the human genome, chromosome 13 contains around 114 million base pairs and encodes over 400 genes. Chromosome 13 houses key tumor suppressor genes, including BRCA2 and RB1, which are associated with breast cancer susceptibility and retinoblastoma, respectively. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

REFERENCES

- Dunham, A., Matthews, L.H., Burton, J., Ashurst, J.L., Howe, K.L., Ashcroft, K.J., Beare, D.M., Burford, D.C., Hunt, S.E., Griffiths-Jones, S., Jones, M.C., Keenan, S.J., Oliver, K., et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
- Hammarsund, M., Corcoran, M.M., Wilson, W., Zhu, C., Einhorn, S., Sangfelt, O. and Grandér, D. 2004. Characterization of a novel B-CLL candidate gene—DLEU7—located in the 13q14 tumor suppressor locus. *FEBS Lett.* 556: 75-80.
- Bugge, M., Collins, A., Hertz, J.M., Eiberg, H., Lundsteen, C., Brandt, C.A., Bak, M., Hansen, C., Delozier, C.D., Lespinasse, J., Tranebjaerg, L., Hahnenmann, J.M., Rasmussen, K., Bruun-Petersen, G., Duprez, L., Tommerup, N. and Petersen, M.B. 2004. Non-disjunction of chromosome 13. *Hum. Mol. Genet.* 16: 2004-2010.
- Hall, H.E., Chan, E.R., Collins, A., Judis, L., Shirley, S., Surti, U., Hoffner, L., Cockwell, A.E., Jacobs, P.A. and Hassold, T.J. 2007. The origin of trisomy 13. *Am. J. Med. Genet. A* 143: 2242-2248.
- Hassler, M., Singh, S., Yue, W.W., Luczynski, M., Lakbir, R., Sanchez-Sanchez, F., Bader, T., Pearl, L.H. and Mittnacht, S. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction and holoprotein architecture. *Mol. Cell* 28: 371-385.

CHROMOSOMAL LOCATION

Genetic locus: DLEU7 (human) mapping to 13q14.3; Dleu7 (mouse) mapping to 14 D1.

SOURCE

DLEU7 (A-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of DLEU7 of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84084 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DLEU7 (A-16) is recommended for detection of DLEU7 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).

DLEU7 (A-16) is also recommended for detection of DLEU7 in additional species, including equine.

Suitable for use as control antibody for DLEU7 siRNA (h): sc-105300, DLEU7 siRNA (m): sc-143054, DLEU7 shRNA Plasmid (h): sc-105300-SH, DLEU7 shRNA Plasmid (m): sc-143054-SH, DLEU7 shRNA (h) Lentiviral Particles: sc-105300-V and DLEU7 shRNA (m) Lentiviral Particles: sc-143054-V.

Molecular Weight of DLEU7: 24 kDa.

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) 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.

RESEARCH USE

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