SANTA CRUZ BIOTECHNOLOGY, INC.

LBH (D-16): sc-161791



BACKGROUND

LBH (limb bud and heart development homolog) is a 105 amino acid homolog of the mouse Lbh protein that functions in transcriptional regulation. Localized to the nucleus and expressed in tissues throughout the body, LBH is thought to positively modulate cardiac transcription factors, thereby activating transcription of cardiac-related genes and controlling normal heart development. Deregulation of LBH is associated with partial trisomy 2p syndrome, a disorder that includes congenital heart disease (CHD) and is characterized by defects in cardiac septation, abnormal ventricular development and complex malformations of the outflow and inflow tracts of the heart. LBH contains a C-terminal acidic glutamate-rich domain, an N-terminal hydrophobic region and a putative nuclear localization signal.

REFERENCES

- 1. Kazmierczak, B., Borrmann, L. and Bullerdiek, J. 1999. Assignment of a new gene (LBH). Genomics 56: 136-137.
- Briegel, K.J. and Joyner, A.L. 2001. Identification and characterization of LBH, a novel conserved nuclear protein expressed during early limb and heart development. Dev. Biol. 233: 291-304.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611763. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 4. Briegel, K.J., Baldwin, H.S., Epstein, J.A. and Joyner, A.L. 2005. Congenital heart disease reminiscent of partial trisomy 2p syndrome in mice transgenic for the transcription factor LBH. Development 132: 3305-3316.
- Ai, J., Wang, Y., Tan, K., Deng, Y., Luo, N., Yuan, W., Wang, Z., Li, Y., Wang, Y., Mo, X., Zhu, C., Yin, Z., Liu, M. and Wu, X. 2007. A human homolog of mouse LBH gene, hLBH, expresses in heart and activates SRE and AP-1 mediated MAPK signaling pathway. Mol. Biol. Rep. 35: 179-187.

CHROMOSOMAL LOCATION

Genetic locus: LBH (human) mapping to 2p23.1; Lbh (mouse) mapping to 17 E1.3.

SOURCE

LBH (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LBH 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.

Blocking peptide available for competition studies, sc-161791 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

LBH (D-16) is recommended for detection of LBH 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).

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

Suitable for use as control antibody for LBH siRNA (h): sc-94947, LBH siRNA (m): sc-146661, LBH shRNA Plasmid (h): sc-94947-SH, LBH shRNA Plasmid (m): sc-146661-SH, LBH shRNA (h) Lentiviral Particles: sc-94947-V and LBH shRNA (m) Lentiviral Particles: sc-146661-V.

Molecular Weight of LBH: 12 kDa.

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) Immunofluo-rescence: 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.

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.