SANTA CRUZ BIOTECHNOLOGY, INC.

Lsh (H-240): sc-28202



BACKGROUND

The SNF2 family of helicases are thought to act as transcriptional regulators by their ability to alter the structure of chromatin. One such member, lymphoid-specific helicase (Lsh, also designated Hells for lymphoid-specific DNA helicase), is highly expressed in lymphoid precursor cells in adult animals and is required for the proliferation of peripheral T lymphocytes. Lsh is also expressed in fetal liver and more abundantly in fetal thymus. Lsh protein shows substantial homology to other members of the SNF2 family that are involved in chromatin remodeling and transcription, however it does not show similarity to members involved in DNA repair or recombination. The similarity of Lsh to another SNF2 homolog, Mi-2, which functions as a transcriptional silencer in chromatin remodeling, suggests that Lsh may participate in chromatin repression to regulate transcription, rather than chromatin "opening".

CHROMOSOMAL LOCATION

Genetic locus: HELLS (human) mapping to 10q23.33; Hells (mouse) mapping to 19 C3.

SOURCE

Lsh (H-240) is a rabbit polyclonal antibody raised against amino acids 1-240 mapping at the N-terminus of Lsh 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.

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.

APPLICATIONS

Lsh (H-240) is recommended for detection of Lsh 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).

Lsh (H-240) is also recommended for detection of Lsh in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Lsh siRNA (h): sc-38033, Lsh siRNA (m): sc-38034, Lsh shRNA Plasmid (h): sc-38033-SH, Lsh shRNA Plasmid (m): sc-38034-SH, Lsh shRNA (h) Lentiviral Particles: sc-38033-V and Lsh shRNA (m) Lentiviral Particles: sc-38034-V.

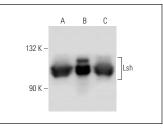
Molecular Weight of Lsh: 100 kDa.

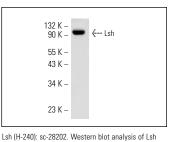
Positive Controls: Lsh (h2): 293T Lysate: sc-177484, CCRF-CEM cell lysate: sc-2225 or JM1 whole cell lysate: sc-364233.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA





expression in CCRF-CEM whole cell lysate

Lsh (H-240): sc-28202. Western blot analysis of Lsh expression in non-transfected 293T: sc-117752 $({\rm A}),$ human Lsh transfected 293T: sc-177484 $({\rm B})$ and JM1 $({\rm C})$ whole cell lysates.

SELECT PRODUCT CITATIONS

- Zhou, R., et al. 2009. Senescence delay and repression of p16INK4a by Lsh via recruitment of histone deacetylases in human diploid fibroblasts. Nucleic Acids Res. 37: 5183-5196.
- Niu, J., et al. 2011. Transcriptional activation of the senescence regulator Lsh by E2F1. Mech. Ageing Dev. 132: 180-186.
- Thaler, R., et al. 2011. Homocysteine suppresses the expression of the collagen cross-linker lysyl oxidase involving IL-6, Fli1, and epigenetic DNA methylation. J. Biol. Chem. 286: 5578-5588.
- Benavente, C.A., et al. 2014. Chromatin remodelers HELLS and UHRF1 mediate the epigenetic deregulation of genes that drive retinoblastoma tumor progression. Oncotarget 5: 9594-9608.

PROTOCOLS

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



Try Lsh (H-4): sc-46665 or Lsh (C-8): sc-365814,

our highly recommended monoclonal alternatives to Lsh (H-240). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see Lsh (H-4): sc-46665.