

Lsh (M-15): sc-11844

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 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".

REFERENCES

1. Eisen, J.A., et al. 1995. Evolution of the SNF2 family of proteins: sub-families with distinct sequences and functions. *Nucleic Acids Res.* 23: 2715-2723.
2. Jarvis, C.D., et al. 1996. A novel putative helicase produced in early murine lymphocytes. *Gene* 169: 203-207.
3. Imbalzano, A.N. 1998. Energy-dependent chromatin remodelers: complex complexes and their components. *Crit. Rev. Eukaryot. Gene Expr.* 8: 225-255.
4. Jones, P.L., et al. 1998. Methylated DNA and MeCP2 recruit histone deacetylase to repress transcription. *Nat. Genet.* 19: 187-191.
5. Wade, P.A., et al. 1998. A multiple subunit Mi-2 histone deacetylase from *Xenopus laevis* cofractionates with an associated SNF2 superfamily ATPase. *Curr. Biol.* 8: 843-846.

CHROMOSOMAL LOCATION

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

SOURCE

Lsh (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Lsh of mouse 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-11844 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-11844 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

Lsh (M-15) 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 (M-15) is also recommended for detection of Lsh in additional species, including equine, canine, bovine 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.

Lsh (M-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

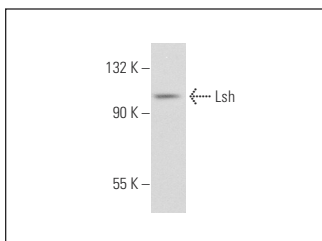
Molecular Weight of Lsh: 100 kDa.

Positive Controls: F9 cell lysate: sc-2245, CCRF-CEM cell lysate: sc-2225 or CCRF-CEM nuclear extract: sc-2146.

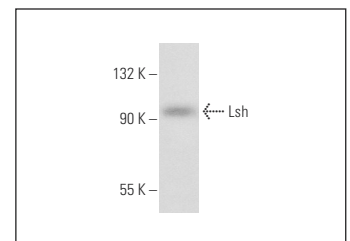
RECOMMENDED SECONDARY REAGENTS

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

DATA



Lsh (M-15): sc-11844. Western blot analysis of Lsh expression in F9 whole cell lysate.



Lsh (M-15): sc-11844. Western blot analysis of Lsh expression in CCRF-CEM whole cell lysate.

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.