

# Lsh (N-16): sc-11841

## 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."

## REFERENCES

1. Eisen, J.A., et al. 1995. Evolution of the SNF2 family of proteins: subfamilies 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 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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-11841 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-11841 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 (N-16) 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 (N-16) is also recommended for detection of Lsh in additional species, including equine, canine, bovine, porcine and avian.

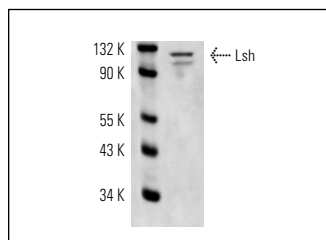
Suitable for use as control antibody for Lsh siRNA (h): sc-38033, Lsh siRNA (m): sc-38034, Lsh shRNA Plasmid (h): sc-38033-SH, Lsh shRNA Plasmid (m): sc-38034-SH, Lsh shRNA (h) Lentiviral Particles: sc-38033-V and Lsh shRNA (m) Lentiviral Particles: sc-38034-V.

Lsh (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Lsh: 100 kDa.

Positive Controls: JM1 whole cell lysate, CCRF-CEM cell lysate: sc-2225 or CCRF-CEM nuclear extract: sc-2146.

## DATA



Lsh (N-16): sc-11841. Western blot analysis of Lsh expression in CCRF-CEM nuclear extract.

## SELECT PRODUCT CITATIONS

1. Sun, L.Q., et al. 2004. Growth retardation and premature aging phenotypes in mice with disruption of the SNF2-like gene, PASG. *Genes Dev.* 18: 1035-1046.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.