## SANTA CRUZ BIOTECHNOLOGY, INC.

# HNRPLL (E-7): sc-390455



BACKGROUND

Heterogeneous nuclear ribonucleoprotein L-like (HNRPLL), also known as stromal RNA-regulating factor (SRRF), is a 542 amino acid nuclear protein. HNRPLL shares 69% amino acid homology with hnRNP L, a protein that binds to the 3' end of introns to modulate alternative splicing mechanisms of pre-mRNAs in normal cells. Due to this homology, HNRPLL is thought to bind RNA and participate in mRNA processing. HNRPLL contains three RNA-regulating motif (RRF) domains, which have RNA-binding regions. HNRPLL interacts with BAT1, an RNA-dependent ATPase that controls ATP hydrolysis during pre-mRNA splicing. HNRPLL is widely expressed in human tissues, including pancreas, lung, kidney, placenta, heart, skeletal muscle and bone marrow stromal cells. HNRPLL is expressed as four isoforms produced by alternative splicing.

### REFERENCES

- 1. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603083. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 2. Hui, J., et al. 2003. Novel functional role of CA repeats and HNRNP L in RNA stability. RNA 9: 931-936.
- 3. Shur, I., et al. 2004. Alternatively spliced isoforms of a novel stromal RNA regulating factor. Gene 334: 113-121.
- Hui, J., et al. 2005. Intronic CA-repeat and CA-rich elements: a new class of regulators of mammalian alternative splicing. EMBO J. 24: 1988-1998.
- Lim, J., et al. 2006. A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. Cell 125: 801-814.
- Park, H.G., et al. 2007. Heterogeneous nuclear ribonucleoprotein D/AUF1 interacts with heterogeneous nuclear ribonucleoprotein L. J. Biosci. 32: 1263-1272.
- Hung, L.H., et al. 2008. Diverse roles of HNRNP L in mammalian mRNA processing: a combined microarray and RNAi analysis. RNA 14: 284-296.

## **CHROMOSOMAL LOCATION**

Genetic locus: HNRPLL (human) mapping to 2p22.1; Hnrpll (mouse) mapping to 17 E3.

## SOURCE

HNRPLL (E-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 29-42 near the N-terminus of HNRPLL of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390455 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

HNRPLL (E-7) is recommended for detection of HNRPLL isoforms 1, 2, 3 and 4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for HNRPLL siRNA (h): sc-94907, HNRPLL siRNA (m): sc-146066, HNRPLL shRNA Plasmid (h): sc-94907-SH, HNRPLL shRNA Plasmid (m): sc-146066-SH, HNRPLL shRNA (h) Lentiviral Particles: sc-94907-V and HNRPLL shRNA (m) Lentiviral Particles: sc-146066-V.

Molecular Weight of HNRPLL: 60 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or CCRF-CEM cell lysate: sc-2225.

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG א BP-HRP: sc-516102 or m-IgG א BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

#### DATA





HNRPLL (E-7): sc-390455. Western blot analysis of HNRPLL expression in K-562 (A) and CCRF-CEM (B) whole cell lysates.

HNRPLL (E-7): sc-390455. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear, nucleolar and cytoplasmic localization.

### **STORAGE**

Store at 4° C, \*\*DO 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.

## PROTOCOLS

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