SANTA CRUZ BIOTECHNOLOGY, INC.

hnRNP L (N-15): sc-30720



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BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription, pre-mRNA processing and mature mRNA transport to the cytoplasm and translation. They also bind heterogeneous nuclear RNA (hnRNA), which are the transcripts produced by RNA polymerase II). There are approximately 20 known hnRNP proteins, which range in size from 34 kDa to 120 kDa, and their complexes are the major constituents of the spliceosome. The majority of hnRNP proteins components are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm. hnRNP I, also designated polypyrimidine tract-binding protein (PTB) and its homolog hnRNP L bind to the 3' end of introns to modulate alternative splicing mechanisms of pre-mRNAs in normal cells and the translation of several viruses, including hepatitis C virus (HCV). The human hnRNP I gene maps to chromosome 19p13.3 and encodes a 57 kDa protein that is localized in the nucleoplasm. hnRNP L has a molecular mass of 68 kDa and like hnRNP I, is also localized in the nucleoplasm.

REFERENCES

- Badolato, J., et al. 1995. Identification and characterisation of a novel human RNA-binding protein. Gene 166: 323-337.
- Siomi, H. and Dreyfuss, G. 1995. A nuclear localization domain in the hnRNP A1 protein. J. Cell Bio. 129: 551-560.
- Perez, I., et al. 1997. Multiple RRMs contribute to RNA binding specificity and affinity for polypyrimidine tract binding protein. Biochemistry 36: 11881-11890.
- Hahm, B., et al. 1998. Heterogeneous nuclear ribonucleoprotein L interacts with the 3' border of the internal ribosomal entry site of hepatitis C virus. J. Virol. 72: 8782-8788.
- Hahm, B., et al. 1998. Polypyrimidine tract-binding protein interacts with HnRNP L. FEBS Lett. 425: 401-406.

CHROMOSOMAL LOCATION

Genetic locus: HNRPL (human) mapping to 19q13.2; Hnrpl (mouse) mapping to 7 A3.

SOURCE

hnRNP L (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of hnRNP L 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-30720 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

hnRNP L (N-15) is recommended for detection of hnRNP L 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).

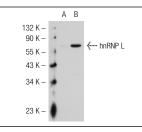
hnRNP L (N-15) is also recommended for detection of hnRNP L in additional species, including canine, bovine and porcine.

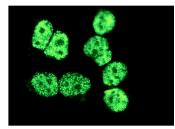
Suitable for use as control antibody for hnRNP L siRNA (h): sc-38284, hnRNP L siRNA (m): sc-38285, hnRNP L shRNA Plasmid (h): sc-38284-SH, hnRNP L shRNA Plasmid (m): sc-38285-SH, hnRNP L shRNA (h) Lentiviral Particles: sc-38284-V and hnRNP L shRNA (m) Lentiviral Particles: sc-38285-V.

Molecular Weight of hnRNP L: 68 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SHP-77 whole cell lysate: sc-364258 or MEG-01 nuclear extract: sc-2150.

DATA





hnRNP L (N-15): sc-30720. Western blot analysis of hnRNP L expression in non-transfected: sc-117752 (A) and human hnRNP L transfected: sc-117301 (B) 293T whole cell lysates. hnRNP L (N-15): sc-30720. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

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.

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Try hnRNP L (4D11): sc-32317 or hnRNP L (D-5): sc-48391, our highly recommended monoclonal aternatives to hnRNP L (N-15). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see hnRNP L (4D11): sc-32317.