

hnRNP L (A-11): sc-46673

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, 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 encodes a protein that is localized in the nucleoplasm. hnRNP L like hnRNP I, is also localized in the nucleoplasm.

REFERENCES

1. Badolato, J., et al. 1995. Identification and characterisation of a novel human RNA-binding protein. *Gene* 166: 323-337.
2. Siomi, H., et al. 1995. A nuclear localization domain in the hnRNP A1 protein. *J. Cell Biol.* 129: 551-560.

CHROMOSOMAL LOCATION

Genetic locus: HNRNPL (human) mapping to 19q13.2; Hnrnp1 (mouse) mapping to 7 A3.

SOURCE

hnRNP L (A-11) is a mouse monoclonal antibody raised against amino acids 257-334 of hnRNP L of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

hnRNP L (A-11) is recommended for detection of hnRNP L of mouse, rat and human origin by Western Blotting (starting dilution 1:50, dilution range 1:50-1:200), 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), immunohistochemistry (including paraffin-embedded sections) (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 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.

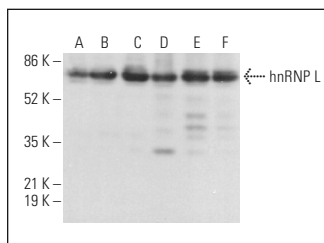
Molecular Weight of hnRNP L: 68 kDa.

Positive Controls: C6 whole cell lysate: sc-364373, MM-142 cell lysate: sc-2246 or CCRF-CEM cell lysate: sc-2225.

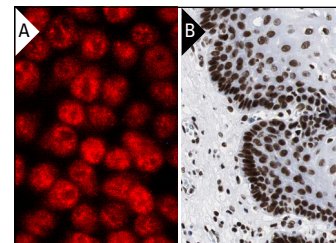
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



hnRNP L (A-11): sc-46673. Western blot analysis of hnRNP L expression in HeLa (A), CCRF-CEM (B), U-698-M (C), MM-142 (D), C6 (E) and PC-12 (F) whole cell lysates.



hnRNP L (A-11): sc-46673. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear staining of surface epithelial cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

1. Takeshita, M., et al. 2009. Proanthocyanidin from blueberry leaves suppresses expression of subgenomic hepatitis C virus RNA. *J. Biol. Chem.* 284: 21165-21176.
2. Kawai, A., et al. 2013. Folliculin regulates cyclin D1 expression through *cis*-acting elements in the 3' untranslated region of cyclin D1 mRNA. *Int. J. Oncol.* 42: 1597-1604.
3. Rashka, C., et al. 2020. Analysis of fibroblasts from patients with *cb1C* and *cb1G* genetic defects of cobalamin metabolism reveals global dysregulation of alternative splicing. *Hum. Mol. Genet.* E-published.

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.

CONJUGATES

See **hnRNP L (4D11): sc-32317** for hnRNP L antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.