hnRNP A1 (h2): 293T Lysate: sc-111770



The Power to Overtin

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription and pre-mRNA processing, as well as 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 maps to chromosome 19p13.3 and encodes a protein that is localized in the nucleoplasm. hnRNP L, like hnRNP I, is also localized in the nucleoplasm.

REFERENCES

- Good, P.J., Rebbert, M.L. and Dawid, I.B. 1993. Three new members of the RNP protein family in *Xenopus*. Nucleic Acids Res. 21: 999-1006.
- 2. Myer, V.E. and Steitz, J.A. 1995. Isolation and characterization of a novel, low abundance hnRNP protein: A0. RNA 1: 171-182.
- Badolato, J., Gardiner, E., Morrison, N. and Eisman, J. 1995. Identification and characterisation of a novel human RNA-binding protein. Gene 166: 323-337.
- 4. Siomi, H. and Dreyfuss, G. 1995. A nuclear localization domain in the hnRNP A1 protein. J. Cell Biol. 129: 551-560.
- Hanamura, A., Cáceres, J.F., Mayeda, A., Franza, B.R., Jr. and Krainer, A.R. 1998. Regulated tissue-specific expression of antagonistic pre-mRNA splicing factors. RNA 4: 430-444.
- Kim, J.H., Hahm, B., Kim, Y.K., Choi, M. and Jang, S.K. 2000. Protein-protein interaction among hnRNPs shuttling between nucleus and cytoplasm. J. Mol. Biol. 298: 395-405.
- Melcak, I., Cermanová, S., Jirsová, K., Koberna, K., Malínský, J. and Raska,
 1. 2000. Nuclear pre-mRNA compartmentalization: trafficking of released transcripts to splicing factor reservoirs. Mol. Biol. Cell 11: 497-510.

CHROMOSOMAL LOCATION

Genetic locus: HNRNPA1 (human) mapping to 12q13.13.

PRODUCT

hnRNP A1 (h2): 293T Lysate represents a lysate of human hnRNP A1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

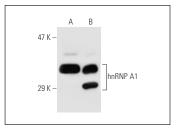
APPLICATIONS

hnRNP A1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive hnRNP A1 antibodies. Recommended use: 10-20 μ l per lane

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

hnRNP A1 (9H10): sc-56700 is recommended as a positive control antibody for Western Blot analysis of enhanced human hnRNP A1 expression in hnRNP A1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



hnRNP A1 (9H10): sc-56700. Western blot analysis of hnRNP A1 expression in non-transfected: sc-117752 (**A**) and human hnRNP A1 transfected: sc-111770 (**B**) 293T

RESEARCH USE

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

PROTOCOLS

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