

hnRNP A1 (E-17): sc-10030

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.

CHROMOSOMAL LOCATION

Genetic locus: HNRNPA1 (human) mapping to 12q13.13; Hnrnpa1 (mouse) mapping to 15 F3.

SOURCE

hnRNP A1 (E-17) is available as either goat (sc-10030) or rabbit (sc-10030-R) polyclonal affinity purified antibody raised against a peptide mapping within an internal region of hnRNP A1 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-10030 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for ChIP application, sc-10030 X, 200 µg/0.1 ml.

APPLICATIONS

hnRNP A1 (E-17) is recommended for detection of hnRNP A1 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 A1 (E-17) is also recommended for detection of hnRNP A1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for hnRNP A1 siRNA (h2): sc-270345, hnRNP A1 siRNA (m): sc-35576, hnRNP A1 shRNA Plasmid (h2): sc-270345-SH, hnRNP A1 shRNA Plasmid (m): sc-35576-SH, hnRNP A1 shRNA (h2) Lentiviral Particles: sc-270345-V and hnRNP A1 shRNA (m) Lentiviral Particles: sc-35576-V.

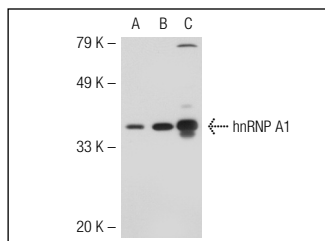
hnRNP A1 (E-17) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of hnRNP A1 isoforms: 29/34/39 kDa.

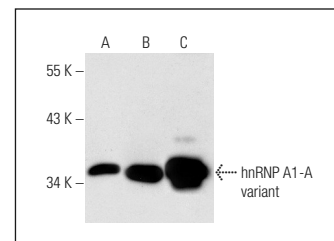
STORAGE

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

DATA



hnRNP A1 (E-17): sc-10030. Western blot analysis of hnRNP A1 expression in non-transfected: sc-117752 (A) and human hnRNP A1 transfected: sc-117212 (B) 293T whole cell lysates and HeLa nuclear extract (C).



hnRNP A1 (E-17): sc-10030. Western blot analysis of hnRNP A1 expression in non-transfected 293T: sc-117752 (A), human hnRNP A1 transfected 293T: sc-114969 (B) and HeLa (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Donev, R., et al. 2003. Recruitment of heterogeneous nuclear ribonucleoprotein A1 *in vivo* to the LMP/TAP region of the major histocompatibility complex. *J. Biol. Chem.* 278: 5214-5226.
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- Mori, A., et al. 2006. Capsaicin, a component of red peppers, inhibits the growth of androgen-independent, p53 mutant prostate cancer cells. *Cancer Res.* 66: 3222-3229.
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- Choi, H.J., et al. 2015. The inhibitory effects of *Geranium thunbergii* on interferon- γ - and LPS-induced inflammatory responses are mediated by Nrf2 activation. *Int. J. Mol. Med.* 35: 1237-1245.

RESEARCH USE

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