

# hnRNP E1/E2 (H-110): sc-28725

## BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription, 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 protein components are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm, such as hnRNP E1 and E2. hnRNP E1 may function in the cytoplasm as a translational regulatory protein, while hnRNP E2 stabilizes mRNA to enhance polioviral mRNA translation. hnRNP M is involved in pre-mRNA splicing and in stress-induced transient splicing arrest.

## REFERENCES

1. Badolato, J., Gardiner, E., Morrison, N. and Eisman, J. 1995. Identification and characterisation of a novel human RNA-binding protein. *Gene* 166: 323-327.
2. Siomi, H. and Dreyfuss, G. 1995. A nuclear localization domain in the hnRNP A1 protein. *J. Cell Biol.* 129: 551-560.
3. Gattoni, R., Mahe, D., Mahl, P., Fischer, N., Mattei, M.G., Stevenin, J. and Fuchs, J.P. 1996. The human hnRNP-M proteins: structure and relation with early heat shock-induced splicing arrest and chromosome mapping. *Nucleic Acids Res.* 24: 2535-2542.
4. Ostareck, D.H., Ostareck-Lederer, A., Wilm, M., Thiele, B.J., Mann, M. and Hentze, M.W. 1997. mRNA silencing in erythroid differentiation: hnRNP K and hnRNP E1 regulate 15-lipoxygenase translation from the 3' end. *Cell* 89: 597-606.

## CHROMOSOMAL LOCATION

Genetic locus: PCBP1 (human) mapping to 2p13.3, PCBP2 (human) mapping to 12q13.13; Pcbp1 (mouse) mapping to 6 D1, Pcbp2 (mouse) mapping to 15 F3.

## SOURCE

hnRNP E1/E2 (H-110) is a rabbit polyclonal antibody raised against amino acids 171-280 mapping within an internal region of hnRNP E1 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.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

hnRNP E1/E2 (H-110) is recommended for detection of hnRNP E1 and, to a lesser extent, hnRNP E2 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 E1/E2 (H-110) is also recommended for detection of hnRNP E1 and, to a lesser extent, hnRNP E2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for hnRNP E1/E2 siRNA (h): sc-43843, hnRNP E1/E2 shRNA Plasmid (h): sc-43843-SH and hnRNP E1/E2 shRNA (h) Lentiviral Particles: sc-43843-V.

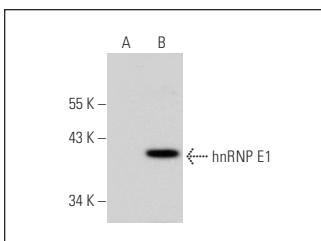
Molecular Weight of hnRNP E1: 43 kDa.

Positive Controls: hnRNP E1 (m): 293T Lysate: sc-120856.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



hnRNP E1/E2 (H-110): sc-28725. Western blot analysis of hnRNP E1 expression in non-transfected: sc-117752 (A) and mouse hnRNP E1 transfected: sc-120856 (B) 293T whole cell lysates.

## RESEARCH USE

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

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Try **hnRNP E1/E2 (F-6): sc-393076** or **hnRNP E1 (E-2): sc-137249**, our highly recommended monoclonal alternatives to hnRNP E1/E2 (H-110).