

hnRNP E2 (N-16): sc-30723

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, 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

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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.
5. Kim, J.H., Hahn, 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.

CHROMOSOMAL LOCATION

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

SOURCE

hnRNP E2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of hnRNP E2 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-30723 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

hnRNP E2 (N-16) is recommended for detection of hnRNP E2 and to a lesser extent, hnRNP E1 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 E2 (N-16) is also recommended for detection of hnRNP E2 and to a lesser extent, hnRNP E1 in additional species, including equine, canine, bovine, porcine and avian.

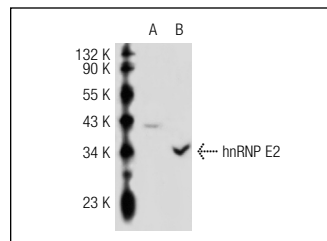
Molecular Weight of hnRNP E2: 40 kDa.

Positive Controls: hnRNP E2 (h): 293T Lysate: sc-111924, K-562 whole cell lysate: sc-2203 or Sol8 nuclear extract: sc-2157.

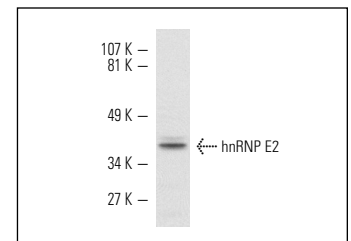
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



hnRNP E2 (N-16): sc-30723. Western blot analysis of hnRNP E2 expression in non-transfected: sc-117752 (A) and human hnRNP E2 transfected: sc-111924 (B) 293T whole cell lysates.



hnRNP E2 (N-16): sc-30723. Western blot analysis of hnRNP E2 expression in Sol8 nuclear extract.

RESEARCH USE

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

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Try **hnRNP E2 (B-7): sc-514787** or **hnRNP E2 (F-3): sc-514975**, our highly recommended monoclonal alternatives to hnRNP E2 (N-16).