

hnRNP E1 (T-18): sc-16504

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 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.

CHROMOSOMAL LOCATION

Genetic locus: PCBP1 (human) mapping to 2p13.3; Pcbp1 (mouse) mapping to 6 D1.

SOURCE

hnRNP E1 (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of hnRNP E1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16504 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

hnRNP E1 (T-18) is recommended for detection of 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 E1 (T-18) is also recommended for detection of hnRNP E1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for hnRNP E1 siRNA (h): sc-38268, hnRNP E1 siRNA (m): sc-38269, hnRNP E1 shRNA Plasmid (h): sc-38268-SH, hnRNP E1 shRNA Plasmid (m): sc-38269-SH, hnRNP E1 shRNA (h) Lentiviral Particles: sc-38268-V and hnRNP E1 shRNA (m) Lentiviral Particles: sc-38269-V.

Molecular Weight of hnRNP E1: 43 kDa.

Positive Controls: hnRNP E1 (m): 293T Lysate: sc-120856 or Hep G2 cell lysate: sc-2227.

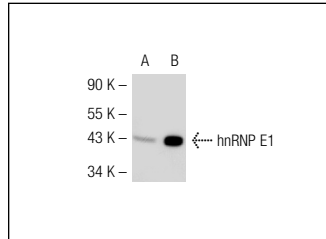
STORAGE

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

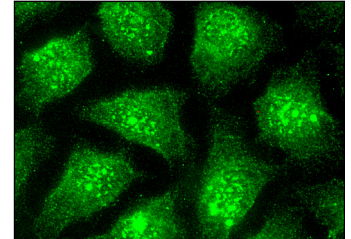
RESEARCH USE

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

DATA



hnRNP E1 (T-18): sc-16504. 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.



hnRNP E1 (T-18): sc-16504. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

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- Wang, H., et al. 2010. Proteomic and functional analyses reveal the potential involvement of endoplasmic reticulum stress and α -CP1 in the anti-cancer activities of oridonin in Hep G2 cells. *Integr. Cancer Ther.* 10: 160-167.
- Wang, H., et al. 2010. Proteomic identification of proteins involved in the anticancer activities of oridonin in HepG2 cells. *Phytomedicine* 18: 163-169.
- Dinh, P.X., et al. 2011. Antagonistic effects of cellular poly(C) binding proteins on vesicular stomatitis virus gene expression. *J. Virol.* 85: 9459-9471.
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- Kim do, K., et al. 2011. p38 mitogen-activated protein kinase and PI3-kinase are involved in up-regulation of mu opioid receptor transcription induced by cycloheximide. *J. Neurochem.* 116: 1077-1087.
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- Meng, N., et al. 2015. Heterogeneous nuclear ribonucleoprotein E1 regulates protein disulphide isomerase translation in oxidized low-density lipoprotein-activated endothelial cells. *Acta Physiol.* 213: 664-775.



Try **hnRNP E1/E2 (F-6): sc-393076** or **hnRNP E1 (E-2): sc-137249**, our highly recommended monoclonal alternatives to hnRNP E1 (T-18).