

hnRNP F (N-15): sc-10045

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to pre-mRNA processing and transport, and also bind heterogeneous nuclear RNA (hnRNA), which are the transcripts produced by RNA polymerase II. hnRNP complexes are the major constituents of the spliceosome and in particular, the hnRNP A1 protein is one of the major pre-mRNA/mRNA binding proteins and also one of the most abundant proteins in the nucleus. hnRNP A1 and A2/B1 regulate the processing of pre-mRNA by directly antagonizing the association of various splicing factors and by influencing the splice site selection on pre-mRNA. The majority of hnRNP proteins components are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm. Most hnRNP proteins, including hnRNP C1 and C2, contain one or more RNA binding domains and are implicated in the processing of pre-mRNA. hnRNPs F and H are largely related factors that preferentially associate with poly(rG) regions on RNA. Isoforms of these proteins are often generated by alternative processing of the pre-mRNA and by posttranslational modifications such as phosphorylation on serines and threonines and methylation of arginines.

CHROMOSOMAL LOCATION

Genetic locus: HNRNPF (human) mapping to 10q11.21; Hnrnpf (mouse) mapping to 6 F1.

SOURCE

hnRNP F (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of hnRNP F 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-10045 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

hnRNP F (N-15) is recommended for detection of hnRNP F 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

hnRNP F (N-15) is also recommended for detection of hnRNP F in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for hnRNP F siRNA (h): sc-38272, hnRNP F siRNA (m): sc-38273, hnRNP F shRNA Plasmid (h): sc-38272-SH, hnRNP F shRNA Plasmid (m): sc-38273-SH, hnRNP F shRNA (h) Lentiviral Particles: sc-38272-V and hnRNP F shRNA (m) Lentiviral Particles: sc-38273-V.

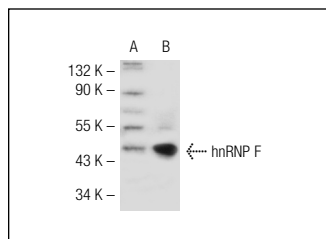
Molecular Weight of hnRNP F: 53 kDa.

Positive Controls: hnRNP F (h): 293T Lysate: sc-111761, K-562 nuclear extract: sc-2130 or Jurkat nuclear extract: sc-2132.

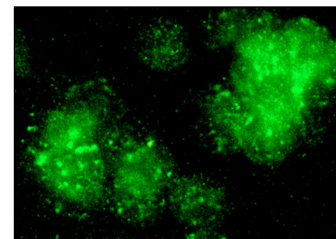
STORAGE

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

DATA



hnRNP F (N-15): sc-10045. Western blot analysis of hnRNP F expression in non-transfected: sc-117752 (A) and human hnRNP F transfected: sc-111761 (B) 293T whole cell lysates.



hnRNP F (N-15): sc-10045. Immunofluorescence staining of methanol-fixed Jurkat cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Zhou, C. and Knipe, D.M. 2002. Association of herpes simplex virus type 1 ICP8 and ICP27 proteins with cellular RNA polymerase II holoenzyme. *J. Virol.* 76: 5893-5904.
2. Chen, Y., et al. 2007. Proteomic identification of proteins associated with the osmoregulatory transcription factor TonEBP/OREBP: functional effects of HSP-90 and PARP-1. *Am. J. Physiol. Renal Physiol.* 292: F981-F992.
3. Li, H., et al. 2009. Identification of mRNA binding proteins that regulate the stability of LDL receptor mRNA through AU-rich elements. *J. Lipid Res.* 50: 820-831.
4. Bubenik, J.L., et al. 2009. Known turnover and translation regulatory RNA-binding proteins interact with the 3' UTR of SECIS-binding protein 2. *RNA Biol.* 6: 73-83.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **hnRNP F (3H4): sc-32309**, our highly recommended monoclonal alternative to hnRNP F (N-15).