hnRNP I (N-20): sc-16547

[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: PTBP1 (human) mapping to 19p13.3; Ptbp1 (mouse) mapping to 10C1.

[SOURCE]
hnRNP I (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of hnRNP I 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-16547 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

[APPLICATIONS]

hnRNP I (N-20) is recommended for detection of hnRNP I 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 I (N-20) is also recommended for detection of hnRNP I in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for hnRNP I siRNA (h): sc-38280, hnRNP I siRNA (m): sc-38281, hnRNP I shRNA Plasmid (h): sc-38280-SH, hnRNP I shRNA Plasmid (m): sc-38281-SH, hnRNP I shRNA (h) Lentiviral Particles: sc-38280-V and hnRNP I shRNA (m) Lentiviral Particles: sc-38281-V.

Molecular Weight of hnRNP I: 57 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or NIH/3T3 + PMA nuclear extract: sc-2125.

[RESEARCH USE]
For research use only, not for use in diagnostic procedures.

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

[DATA]

hnRNP I (N-20): sc-16547. Western blot analysis of hnRNP I expression in HeLa (A) and Jurkat (B) whole cell lysates.

hnRNP I (N-20): sc-16547. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

[SELECT PRODUCT CITATIONS]

Try hnRNP I (SH54): sc-56701 or hnRNP I (A-4): sc-515282, our highly recommended monoclonal alternatives to hnRNP I (N-20).