

# hnRNP I (L-14): sc-16549

## 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; Ptpb1 (mouse) mapping to 10 C1.

## SOURCE

hnRNP I (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of hnRNP I 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-16549 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

hnRNP I (L-14) 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 (L-14) is also recommended for detection of hnRNP I in additional species, including bovine.

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.

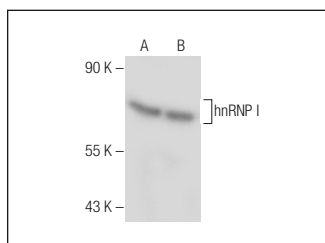
Molecular Weight of hnRNP I: 57 kDa.

Positive Controls: MEG-01 nuclear extract: sc-2150, Jurkat nuclear extract: sc-2132 or HeLa whole cell lysate: sc-2200.

## 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 I (L-14): sc-16549. Western blot analysis of hnRNP I expression in MEG-01 (A) and Jurkat (B) nuclear extracts.

## 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.

## PROTOCOLS

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


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Try **hnRNP I (SH54): sc-56701** or **hnRNP I (A-4): sc-515282**, our highly recommended monoclonal alternatives to hnRNP I (L-14).