## BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of poly-peptides 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 hnRNPs, and their complexes are the major constituents of the spliceosome. The majority of hnRNPs are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm. The A/B subfamily of hnRNPs include A1, A2/B1, A3 and A0. In *Xenopus*, hnRNPA1, A2 and A3 are ubiquitously expressed throughout development as well as in adult tissues. hnRNPA1 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 hnRNPA0 gene is distinct from the other A/B family members, and it encodes a low-abundance protein, which is implicated in mRNA stability.

## REFERENCES


## CHROMOSOMAL LOCATION

Genetic locus: HNRPA2B1 (human) mapping to 7p15.2.

## SOURCE

hnRNPA2/B1 (4H10) is a mouse monoclonal antibody raised against hnRNPA2 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.

hnRNPA2/B1 (4H10) is available conjugated to either phycoerythrin (sc-80993 PE) or fluorescein (sc-80993 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

## STORAGE

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

## APPLICATIONS

hnRNPA2/B1 (4H10) is recommended for detection of hnRNPA2/B1 of 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)] and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for hnRNPA2/B1 siRNA (h): sc-43841, hnRNPA2/B1 shRNA Plasmid (h): sc-43841-SH and hnRNPA2/B1 shRNA (h) Lentiviral Particles: sc-43841-V.

Molecular Weight of hnRNPA2: 36 kDa.
Molecular Weight of hnRNPA1: 38 kDa.
Positive Controls: K-562 nuclear extract: sc-2130, A549 cell lysate: sc-2413 or MEG-01 nuclear extract: sc-2150.

## DATA

![hnRNPA2/B1 (4H10): sc-80993 Western blot analysis of hnRNPA2/B1 expression in A549 whole cell lysate.](image)

## SELECT PRODUCT CITATIONS


## RESEARCH USE

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

## PROTOCOLS

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

See **hnRNPA2/B1 (B-7): sc-374053** for hnRNPA2/B1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.