

hnRNP A/B (G-10): sc-376411

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. The hnRNPs are associated with pre-mRNAs in the nucleus and appear to influence pre-mRNA processing and other aspects of mRNA metabolism and transport. hnRNP A/B (heterogeneous nuclear ribonucleoprotein A/B), also known as HNRNPAB, ABBP1 or HNRPAB, is a 332 amino acid nuclear protein that is ubiquitously expressed. hnRNP A/B binds single-stranded RNA and has a high affinity for G-rich and U-rich regions of hnRNA. hnRNP A/B contains two RRM (RNA recognition motif) domains and interacts with APOBEC1 (apolipoprotein B mRNA editing enzyme complex-1).

CHROMOSOMAL LOCATION

Genetic locus: HNRNPAB (human) mapping to 5q35.3; Hnrnpab (mouse) mapping to 11 B1.3.

SOURCE

hnRNP A/B (G-10) is a mouse monoclonal antibody raised against amino acids 1-63 mapping at the N-terminus of hnRNP A/B of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376411 X, 200 µg/0.1 ml.

hnRNP A/B (G-10) is available conjugated to agarose (sc-376411 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376411 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376411 PE), fluorescein (sc-376411 FITC), Alexa Fluor® 488 (sc-376411 AF488), Alexa Fluor® 546 (sc-376411 AF546), Alexa Fluor® 594 (sc-376411 AF594) or Alexa Fluor® 647 (sc-376411 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376411 AF680) or Alexa Fluor® 790 (sc-376411 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

hnRNP A/B (G-10) is recommended for detection of hnRNP A/B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for hnRNP A/B siRNA (h): sc-75271, hnRNP A/B siRNA (m): sc-75272, hnRNP A/B shRNA Plasmid (h): sc-75271-SH, hnRNP A/B shRNA Plasmid (m): sc-75272-SH, hnRNP A/B shRNA (h) Lentiviral Particles: sc-75271-V and hnRNP A/B shRNA (m) Lentiviral Particles: sc-75272-V.

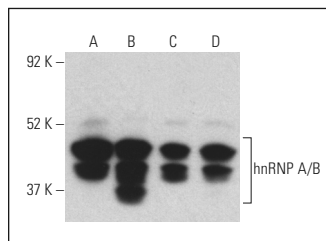
hnRNP A/B (G-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of hnRNP A/B: 37 kDa.

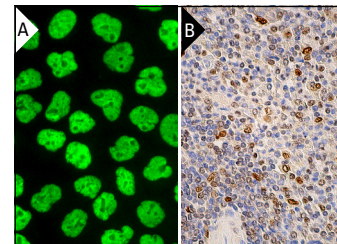
STORAGE

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

DATA



hnRNP A/B (G-10) HRP: sc-376411 HRP. Direct western blot analysis of hnRNP A/B expression in HeLa (A), MM-142 (B), KNRK (C) and NIH/3T3 (D) nuclear extracts.



hnRNP A/B (G-10): sc-376411. Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing nuclear staining of subset of cells in red and white pulps (B).

SELECT PRODUCT CITATIONS

- Wang, X., et al. 2017. Viral DNA replication orientation and hnRNPs regulate transcription of the human papillomavirus 18 late promoter. mBio 8: e00713-17.
- Shioda, N., et al. 2018. Targeting G-quadruplex DNA as cognitive function therapy for ATR-X syndrome. Nat. Med. 24: 802-813.
- Hua, J.T., et al. 2018. Risk SNP-mediated promoter-enhancer switching drives prostate cancer through lncRNA PCAT19. Cell 174: 564-575.e18.
- Zhang, Z.W., et al. 2020. Carboxyl terminal activating region 3 of latent membrane protein 1 encoded by the Epstein-Barr virus regulates cell proliferation and protein expression in NP69 cells. Mol. Med. Rep. 21: 720-730.
- An, J., et al. 2021. Identification of spliceosome components pivotal to breast cancer survival. RNA Biol. 18: 833-842.
- Yu, J., et al. 2021. The GGC repeat expansion in NOTCH2NLC is associated with oculopharyngodistal myopathy type 3. Brain 144: 1819-1832.
- Zhang, M., et al. 2021. Targeting the lnc-OPHN1-5/androgen receptor/hnRNP A1 complex increases Enzalutamide sensitivity to better suppress prostate cancer progression. Cell Death Dis. 12: 855.

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.

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