abcam

Product datasheet

Anti-hnRNP A2B1 antibody ab31645

5 Abreviews 6 References 5 Images

Overview

Product name	Anti-hnRNP A2B1 antibody
Description	Rabbit polyclonal to hnRNP A2B1
Host species	Rabbit
Specificity	The peptide used as the immunogen for this antibody is found within isoform A2 and B1 of the protein and should thus recognize a doublet around 35/37 kDa.
Tested applications	**Suitable for:** IHC-P, WB, ICC/IF, IP
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Chicken, Dog, Xenopus laevis
Immunogen	Synthetic peptide derived from within residues 50 - 150 of Human hnRNP A2B1. Read Abcam's proprietary immunogen policy (Peptide available as ab31644.)
Positive control	This antibody gave a positive signal in the following lysates: HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate Testis (Mouse) Tissue Lysate - normal tissue It also gave a positive result in FFPE human colon tissue sections

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab31645** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★★	Use a concentration of 1 - 5 µg/ml. Detects a band of approximately 35, 38 kDa (predicted molecular weight: 35 , 37 kDa).
ICC/IF	★★★★★	Use a concentration of 5 µg/ml.
IP		Use at an assay dependent concentration.

Target

Function

Involved with pre-mRNA processing. Forms complexes (ribonucleosomes) with at least 20 other different hnRNP and heterogeneous nuclear RNA in the nucleous.

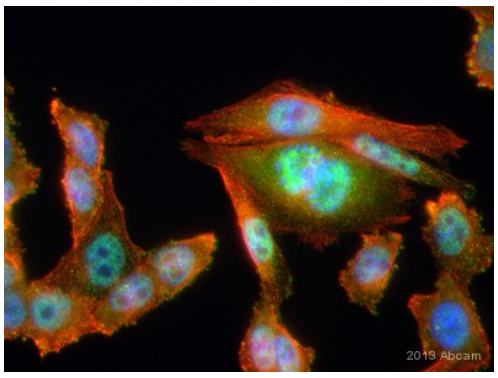
Sequence similarities

Contains 2 RRM (RNA recognition motif) domains.

Cellular localization

Nucleus > nucleoplasm. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Component of ribonucleosomes. Predominantly nucleoplasmic, however isoform A2 is also found in the cytoplasm of cells in some tissues. Not found in the nucleolus.

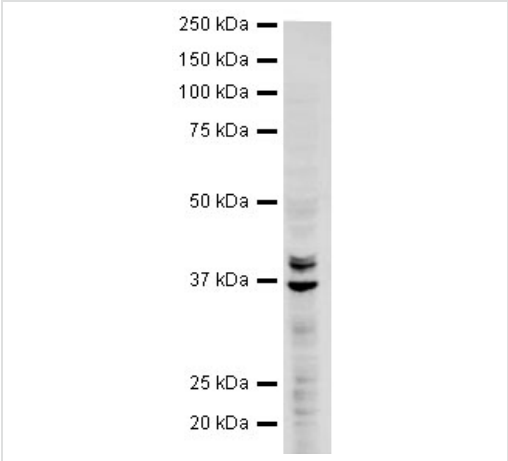
Images



Immunocytochemistry/ Immunofluorescence - Anti-hnRNP A2B1 antibody (ab31645)

This image is courtesy of an anonymous Abreview

ab31645 staining hnRNP A2B1 in CHO cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 1% BSA for 1 hour at 21°C. Samples were incubated with primary antibody (1/200 in PBS + 1% BSA) for 1 hour 30 minutes at 21°C. An Alexa Fluor®488-conjugated Goat anti-rabbit IgG polyclonal (1/1000) was used as the secondary antibody. Green - hnRNP, Red -alpha tubulin, Blue - nuclei.



Western blot - Anti-hnRNP A2B1 antibody (ab31645)

Anti-hnRNP A2B1 antibody (ab31645) at 1 µg/ml + HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 20 µg

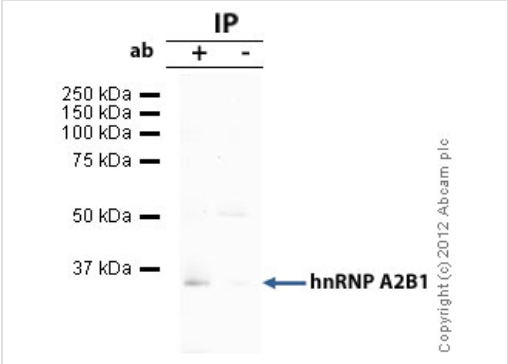
Secondary

Goat polyclonal to Rabbit IgG (Alexa Fluor® 680) at 1/10000 dilution

Performed under reducing conditions.

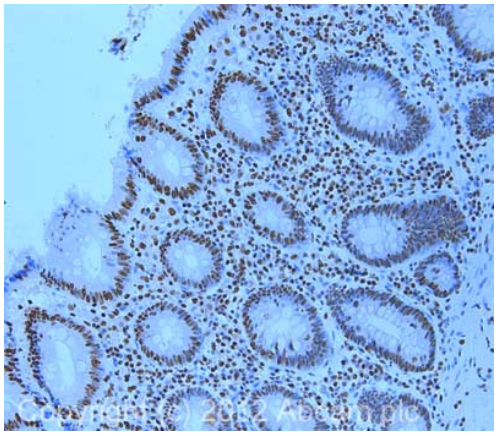
Predicted band size: 35 , 37 kDa
Observed band size: 35,38 kDa

ab31645 is expected to recognize isoform hnrnp A2 and hnrnp B1. The antibody detects bands at approximately 35 and 38 kDa which are of the correct size to correspond to the predicted molecular weight of these isoforms.



Immunoprecipitation - Anti-hnRNP A2B1 antibody (ab31645)

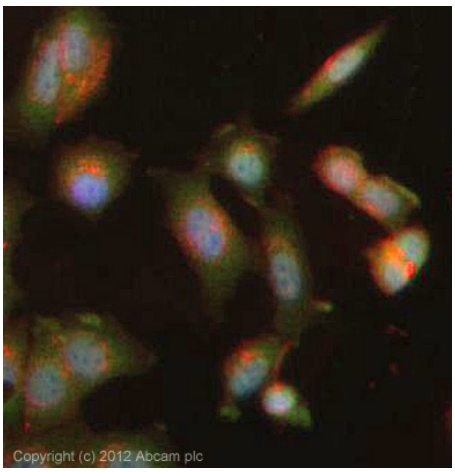
hnRNP A2B1 was immunoprecipitated using 0.5mg Hela whole cell extract, 5µg of Rabbit polyclonal to hnRNP A2B1 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).
The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70^{o}C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab31645.
Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (ab99697).
Band: 35kDa: hnRNP A2B1.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP A2B1 antibody (ab31645)

IHC image of ab31645 staining in human colon formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab31645, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-hnRNP A2B1 antibody (ab31645)

ICC/IF image of ab31645 stained human MCF7 cells. The cells were 4% PFA fixed (10 min), permabilised in 0.1% PBS-Tween (20 min) and incubated with the antibody (ab31645, 5µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive result in 4% PFA fixed (10 min) Hek293 and HepG2 cells at 5µg/ml.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors