abcam

Product datasheet

Anti-hnRNP A1 (citrulline R92) antibody [EPR20174] ab208026

Recombinant RabMAb

5 Images

Overview

Product name	Anti-hnRNP A1 (citrulline R92) antibody [EPR20174]
Description	Rabbit monoclonal [EPR20174] to hnRNP A1 (citrulline R92)
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, Dot blot, IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HEK-293T transfected with GFP-tagged PADI2 and PADI4, respectively, treated with 10 mM calcium chloride and 10 ÂµM Ionomycin, whole cell lysates. Flow Cyt (intra): HEK-293T transfected with GFP-tagged PADI4, treated with 10 mM calcium chloride and 10 ÂµM Ionomycin, cells. IP: HEK-293T transfected with GFP-tagged PADI4, treated with 10 mM calcium chloride and 10 ÂµM Ionomycin, whole cell lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR20174
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab208026 in the following tested applications.

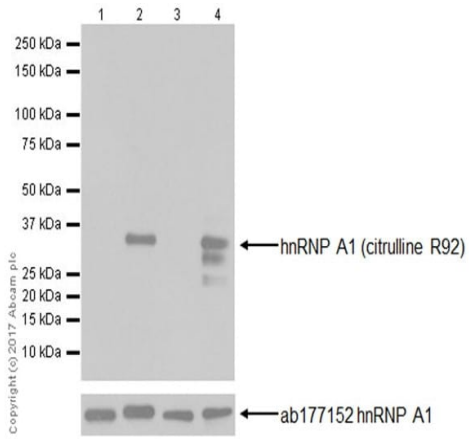
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/600.
WB		1/2000. Predicted molecular weight: 39 kDa.
Dot blot		1/1000.
IP		1/30.

Target

Function	Involved in the packaging of pre-mRNA into hnRNP particles, transport of poly(A) mRNA from the nucleus to the cytoplasm and may modulate splice site selection. May play a role in HCV RNA replication.
Sequence similarities	Contains 2 RRM (RNA recognition motif) domains.
Post-translational modifications	Arg-194, Arg-206 and Arg-225 are dimethylated, probably to asymmetric dimethylarginine. Sumoylated.
Cellular localization	Nucleus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Shuttles continuously between the nucleus and the cytoplasm along with mRNA. Component of ribonucleosomes. In the course of viral infection, colocalizes with HCV NS5B at speckles in the cytoplasm in a HCV-replication dependent manner.

Images



Western blot - Anti-hnRNP A1 (citrulline R92) antibody [EPR20174] (ab208026)

All lanes : Anti-hnRNP A1 (citrulline R92) antibody [EPR20174] (ab208026) at 1/2000 dilution

Lanes 1 & 3 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with a control vector containing GFP tag, treated with 10 mM calcium chloride and 10 µM Ionomycin for 2 hours, whole cell lysate
Lane 2 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with GFP-tagged PADI2 (WT) expression vector, treated with 10 mM calcium chloride and 10 µM Ionomycin for 2 hours, whole cell lysate
Lane 4 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with GFP-tagged PADI4 (WT) expression vector, treated with 10 mM calcium chloride and 10 µM Ionomycin for 2 hours, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.

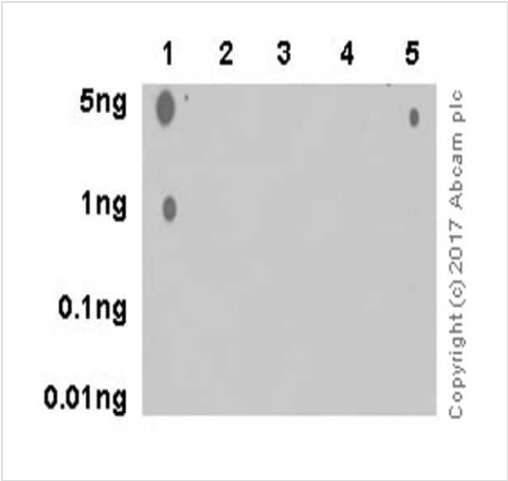
Predicted band size: 39 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

According to Uniprot annotation for HNRNPA1, isoform A1-A (34 kDa) is twenty times more abundant than isoform A1-B (39 kDa). The MW of HNRNPA1L2 is also 34 kD.

In WB this antibody does not cross react with CCDC51 (expected MW 45 kDa).



Dot Blot - Anti-hnRNP A1 (citrulline R92) antibody [EPR20174] (ab208026)

Dot blot analysis of hnRNP A1 (citrulline R92) labeled with ab208026 at 1/1000 dilution.

Lane 1: hnRNP A1 (citrulline R92) peptide.

Lane 2: hnRNP A1 non-citrulline peptide.

Lane 3: hnRNP A3 (citrulline R113) peptide.

Lane 4: hnRNP A0 (citrulline R85) peptide.

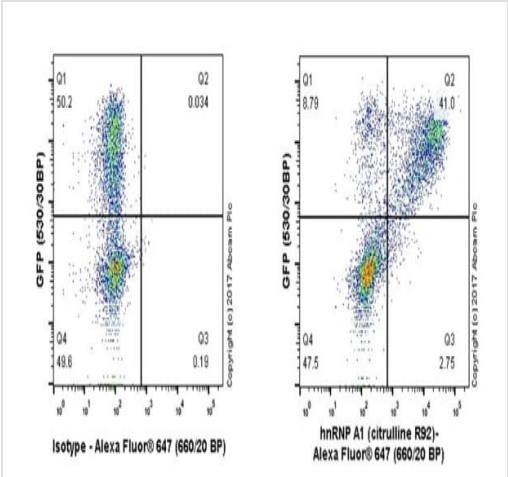
Lane 5: CCDC51(citrulline R142) peptide.

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution was used as secondary antibody.

Based on sequence homology this antibody cross reacts with CCDC51 (citrulline R142) peptide (detected by dot blot only) and hnRNP A1L2 (citrulline R92) protein.

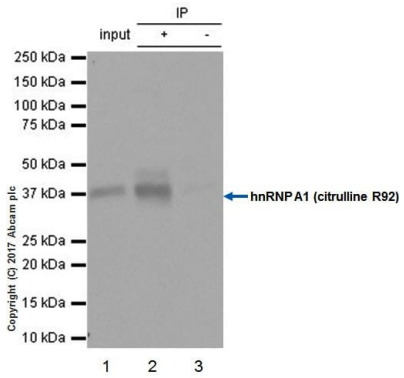
Exposure time: 3 minutes.

Blocking and dilution buffer: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-hnRNP A1 (citrulline R92) antibody [EPR20174] (ab208026)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell line transfected with GFP-tagged PADI4 (WT) expression vector, treated with 10 mM calcium chloride and 10µM Ionomycin for 2 hours,labeling hnRNP A1 (citrulline R92) with ab208026 at 1/600 dilution (right panel) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (left panel). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (150079) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-hnRNP A1 (citrulline R92) antibody [EPR20174] (ab208026)

hnRNP A1 (citrulline R92) was immunoprecipitated from 0.35 mg of HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with GFP-tagged PADI4 (WT) expression vector, treated with 10 mM calcium chloride and 10 µM Ionomycin for 2 hours, whole cell lysate with ab208026 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab208026 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

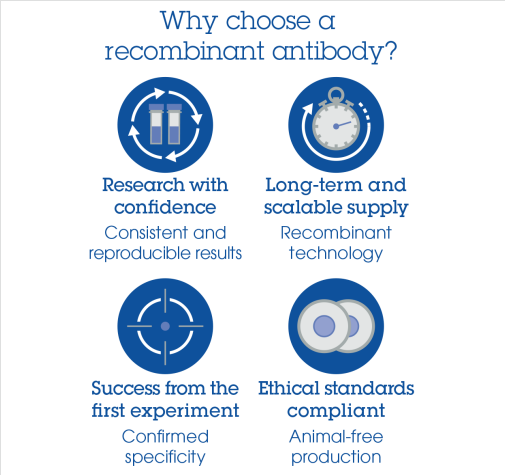
Lane 1: HEK-293T transfected with GFP-tagged PADI4 (WT) expression vector, treated with 10 mM calcium chloride and 10 µM Ionomycin for 2 hours, whole cell lysate 10 µg (Input).

Lane 2: ab208026 IP in HEK-293T transfected with GFP-tagged PADI4 (WT) expression vector, treated with 10 mM calcium chloride and 10 µM Ionomycin for 2 hours, whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab208026 in HEK-293T transfected with GFP-tagged PADI4 (WT) expression vector, treated with 10 mM calcium chloride and 10 µM Ionomycin for 2 hours, whole cell lysate.

Exposure time: Less than 1 second.

Blocking and dilution buffer: 5% NFDM/TBST.



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