# abcam

### Product datasheet

## Anti-hnRNP C1/C2 antibody [EPNCIR152] ab133607

Recombinant RabMAb

★★★★★ <u>2 Abreviews</u> <u>9 References</u> 5 Images

#### Overview

Product name	Anti-hnRNP C1/C2 antibody [EPNCIR152]
Description	Rabbit monoclonal [EPNCIR152] to hnRNP C1/C2
Host species	Rabbit
Specificity	This antibody is specific to isoform C2.
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human
	Predicted to work with: Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, MCF7, HepG2, K562, and 293T cell lysates IHC-P: Human kidney and Human thyroid carcinoma tissues
General notes	This antibody was developed as part of a collaboration between the National Cancer Institute's Center for Cancer Research and the lab of Mirit Aladjem. <u>View antibodies from NCI Center for</u> <u>Cancer Research Collaboration</u> .
	This product is a recombinant monoclonal antibody, which offers several advantages including:
	<ul> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information see here.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit</li> </ul>
	monoclonal antibodies. For details on our patents, please refer to <b><u>RabMAb<sup>®</sup> patents</u></b> .

Properties	
Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPNCIR152
Isotype	lgG

#### Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab133607 in the following tested applications.

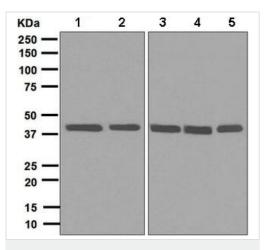
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	<b>★ ★ ★ ★ ★ (1)</b>	1/10000 - 1/50000. Detects a band of approximately 42 kDa (predicted molecular weight: 33 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/250 - 1/500.

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Function	Binds pre-mRNA and nucleates the assembly of 40S hnRNP particles (PubMed:8264621). Specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs, a modification present at internal sites of mRNAs that affects mRNA splicing, processing and stability. M6A alters the local structure in mRNAs and long non-coding RNAs (lncRNAs) via a mechanism named 'm(6)A-switch' to facilitate binding of HNRNPC, leading to regulation of mRNA splicing (PubMed:25719671). Single HNRNPC tetramers bind 230-240 nucleotides. Trimers of HNRNPC tetramers bind 700 nucleotides. May play a role in the early steps of spliceosome assembly and pre-mRNA splicing. Interacts with poly-U tracts in the 3'-UTR or 5'-UTR of mRNA and modulates the stability and the level of translation of bound mRNA molecules (PubMed:12509468, PubMed:16010978, PubMed:7567451, PubMed:8264621).
Sequence similarities	Belongs to the RRM HNRPC family. RALY subfamily. Contains 1 RRM (RNA recognition motif) domain.
Post-translational modifications	Phosphorylated on Ser-260 and Ser-299 in resting cells. Phosphorylated on Ser-253 and on 1 serine residue in the poly-Ser stretch at position 238 in response to hydrogen peroxide. Sumoylated. Sumoylation reduces affinity for mRNA.
Cellular localization	Nucleus. Component of ribonucleosomes.

Images



Western blot - Anti-hnRNP C1/C2 antibody [EPNCIR152] (ab133607) All lanes : Anti-hnRNP C1/C2 antibody [EPNCIR152] (ab133607) at 1/10000 dilution

Lane 1 : HeLa cell lysate Lane 2 : MCF7 cell lysate Lane 3 : HepG2 cell lysate Lane 4 : K562 cell lysate Lane 5 : 293T cell lysate

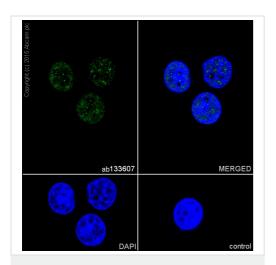
Lysates/proteins at 10 µg per lane.

#### Secondary

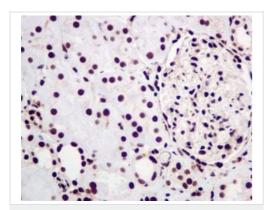
All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 33 kDa

#### Actual band size : 42 kDa

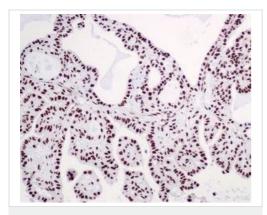


Immunocytochemistry/ Immunofluorescence - AntihnRNP C1/C2 antibody [EPNCIR152] (ab133607) Immunofluorescence staining of MCF-7 cells with purified ab133607 at a working dilution of 1/500, counter-stained with DAPI. The secondary antibody was an Alexa Fluor<sup>®</sup> 488 conjugated goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative control is shown in bottom right hand panel - for the negative control, PBS was used instead of the primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-hnRNP C1/C2 antibody [EPNCIR152] (ab133607) Immunohistochemical analysis of paraffin embedded Human kidney tissue labelling hnRNP C1/C2 with ab133607 antibody at a dilution of 1/250.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-hnRNP C1/C2 antibody [EPNCIR152] (ab133607) Immunohistochemical analysis of paraffin embedded Human thyroid carcinoma tissue labelling hnRNP C1/C2 with ab133607 antibody at a dilution of 1/250.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Why choose  $\alpha$ recombinant antibody? Research with Long-term and confidence scalable supply Consistent and Recombinant reproducible results technology Success from the Ethical standards first experiment compliant Confirmed Animal-free specificity production Anti-hnRNP C1/C2 antibody [EPNCIR152]

(ab133607)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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