

## Product datasheet

# Anti-hnRNP C1/C2 antibody [EP3034Y] - BSA and Azide free ab284719

Recombinant RabMAb

5 Images

### Overview

Product name	Anti-hnRNP C1/C2 antibody [EP3034Y] - BSA and Azide free
Description	Rabbit monoclonal [EP3034Y] to hnRNP C1/C2 - BSA and Azide free
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt or IP
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse and Rat brain lysate, HeLa, and MCF7 lysate. IHC-P: Human breast cancer tissue, Mouse and Rat testis.
General notes	<p>ab284719 is the carrier-free version of <a href="#">ab75822</a>.</p> <p>This product has switched from a hybridoma to recombinant production method on 23rd February 2024.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <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> </ul> <p>For more information <a href="#">see here</a>.</p>

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C.
<b>Storage buffer</b>	pH: 7.20 Constituent: 100% PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP3034Y
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab284719 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
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 33 kDa.
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

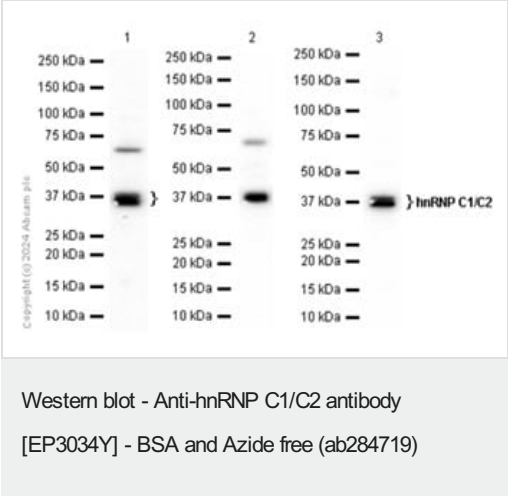
**Application notes** Is unsuitable for Flow Cyt or IP.

## Target

<b>Function</b>	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).
<b>Sequence similarities</b>	Belongs to the RRM HNRPC family. RALY subfamily. Contains 1 RRM (RNA recognition motif) domain.
<b>Post-translational</b>	Phosphorylated on Ser-260 and Ser-299 in resting cells. Phosphorylated on Ser-253 and on 1

<b>modifications</b>	serine residue in the poly-Ser stretch at position 238 in response to hydrogen peroxide. Sumoylated. Sumoylation reduces affinity for mRNA.
<b>Cellular localization</b>	Nucleus. Component of ribonucleosomes.

Images



**All lanes :** Anti-hnRNP C1/C2 antibody [EP3034Y] ([ab75822](#)) at 1/10000 dilution

- Lane 1 :** Mouse brain lysate
- Lane 2 :** Rat brain lysate
- Lane 3 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole lysate

Lysates/proteins at 15 µg per lane.

**Secondary**

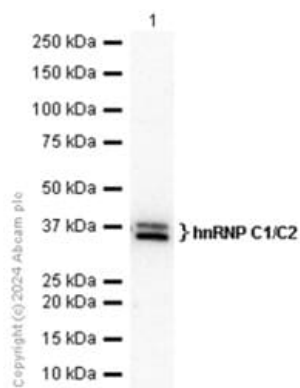
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 33 kDa  
**Observed band size:** 34 kDa

This data was developed using [ab75822](#), the same antibody clone in a different buffer.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: Lane 1, 60 seconds; Lane 2, 5 seconds; Lane 3, 3 seconds.



Western blot - Anti-hnRNP C1/C2 antibody  
[EP3034Y] - BSA and Azide free (ab284719)

Anti-hnRNP C1/C2 antibody [EP3034Y] (**ab75822**) at 1/10000 dilution + MCF7 (Human breast adenocarcinoma epithelial cell) whole lysate at 15 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

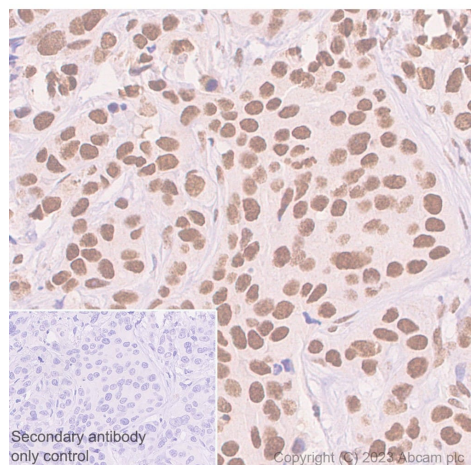
**Predicted band size:** 33 kDa

**Observed band size:** 34 kDa

**Exposure time:** 180 seconds

This data was developed using **ab75822**, the same antibody clone in a different buffer.

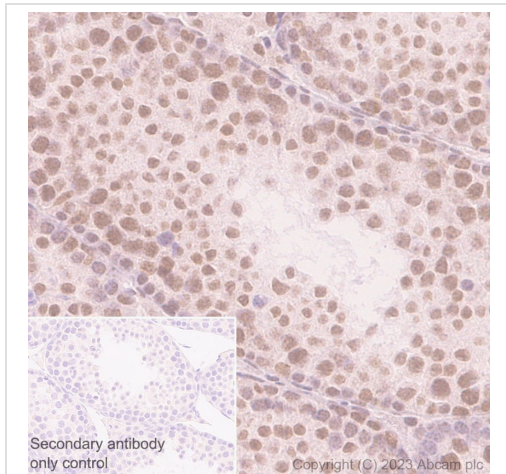
Blocking and diluting buffer and concentration: 5% NFDm/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP C1/C2 antibody  
[EP3034Y] - BSA and Azide free (ab284719)

This data was developed using **ab75822**, the same antibody clone in a different buffer.

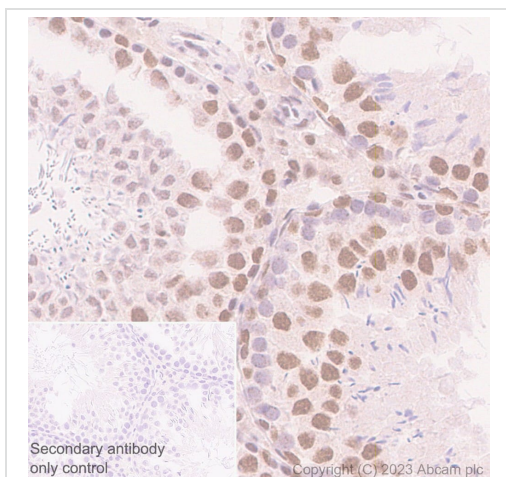
Immunohistochemical analysis of paraffin-embedded Human breast cancer labeling hnRNP C1/C2 with **ab75822** at 1/800 dilution (0.589 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with **ab75822** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP C1/C2 antibody [EP3034Y] - BSA and Azide free (ab284719)

This data was developed using [\*\*ab75822\*\*](#), the same antibody clone in a different buffer.

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling hnRNP C1/C2 with [\*\*ab75822\*\*](#) at 1/800 dilution (0.589 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with [\*\*ab75822\*\*](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP C1/C2 antibody [EP3034Y] - BSA and Azide free (ab284719)

This data was developed using [\*\*ab75822\*\*](#), the same antibody clone in a different buffer.

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling hnRNP C1/C2 with [\*\*ab75822\*\*](#) at 1/800 dilution (0.589 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with [\*\*ab75822\*\*](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

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