Product datasheet

Anti-Nucleolin antibody [EPR7952] ab129200

Overview

Product name
Anti-Nucleolin antibody [EPR7952]

Description
Rabbit monoclonal [EPR7952] to Nucleolin

Host species
Rabbit

Tested applications
Suitable for: WB, IHC-P, Flow Cyt, ICC/IF
Unsuitable for: IP

Species reactivity
Reacts with: Mouse, Rat, Human

Immunogen
Synthetic peptide within Human Nucleolin aa 650-750 (C terminal). The exact sequence is proprietary.

Positive control

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. Stable for 12 months at -20°C.

Dissociation constant (K_D)
K_D = 5.80 x 10^-11 M

Learn more about K_D
**Storage buffer**
- pH: 7.20
- Preservative: 0.01% Sodium azide
- Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant

**Purity**
- Tissue culture supernatant

**Clonality**
- Monoclonal

**Clone number**
- EPR7952

**Isotype**
- IgG

### Applications

Our Abpromise guarantee covers the use of **ab129200** in the following tested applications.

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

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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tr>
<td>WB</td>
<td>1/10000 - 1/50000. Detects a band of approximately 100 kDa (predicted molecular weight: 76 kDa).</td>
<td></td>
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<tr>
<td>IHC-P</td>
<td>1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
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<tr>
<td>ICC/IF</td>
<td>1/100 - 1/250.</td>
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**Application notes**
- Is unsuitable for IP.

### Target

**Function**
- Nucleolin is the major nucleolar protein of growing eukaryotic cells. It is found associated with intranucleolar chromatin and pre-ribosomal particles. It induces chromatin decondensation by binding to histone H1. It is thought to play a role in pre-rRNA transcription and ribosome assembly. May play a role in the process of transcriptional elongation. Binds RNA oligonucleotides with 5'-UUAGGG-3' repeats more tightly than the telomeric single-stranded DNA 5'-TTAGGG-3' repeats.

**Sequence similarities**
- Contains 4 RRM (RNA recognition motif) domains.

**Post-translational modifications**
- Some glutamate residues are glycylated by TTLL8. This modification occurs exclusively on glutamate residues and results in a glycine chain on the gamma-carboxyl group.

**Cellular localization**
- Nucleus > nucleolus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

### Images
All lanes: Anti-Nucleolin antibody [EPR7952] (ab129200) at 1/10000 dilution

Lane 1: Fetal brain lysate
Lane 2: K562 cell lysate
Lane 3: HuT-78 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 76 kDa
Observed band size: 100 kDa

why is the actual band size different from the predicted?

Immunocytochemistry/ Immunofluorescence analysis of HT-29 (Human colorectal adenocarcinoma epithelial cell) cells labeling Nucleolin with purified ab129200 at 1/500 dilution (4.5 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 dilution (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
ab129200, at 1/250 dilution, staining Nucleolin in paraffin-embedded Human colon tissue by Immunohistochemistry.

Flow cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Nucleolin (red) with ab129200 at a 1/2000 dilution. Cells were fixed with 80% methanol and permeabilized with 0.1% Tween-20. A goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (ab172730). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue labelling Nucleolin with ab129200 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A ready to use HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody. Counterstained with hematoxylin.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue labelling Nucleolin with ab129200 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A ready to use HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody. Counterstained with hematoxylin.

Equilibrium disassociation constant (K_D)
Learn more about K_D

Click here to learn more about K_D

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