abcam

Product datasheet

Anti-Nucleolin antibody [EPR7952] ab129200

Recombinant   RabMAb

5 References   8 Images

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	WB: Fetal brain tissue lysate and K562, and HuT-78 cell lysates. IHC-P: Human colon, mouse liver and rat liver tissues. Flow Cyt: HeLa cells. ICC/IF: HT-29
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. Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough. Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility. We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee. In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for. We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

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)	$K_D = 5.80 \times 10^{-11}$ M
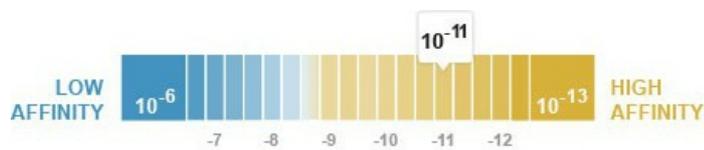
Learn more about K_D

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 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.

Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 100 kDa (predicted molecular weight: 76 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt		1/2000.
ICC/IF		1/100 - 1/250.
Application notes		Is unsuitable for IP.

Target

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
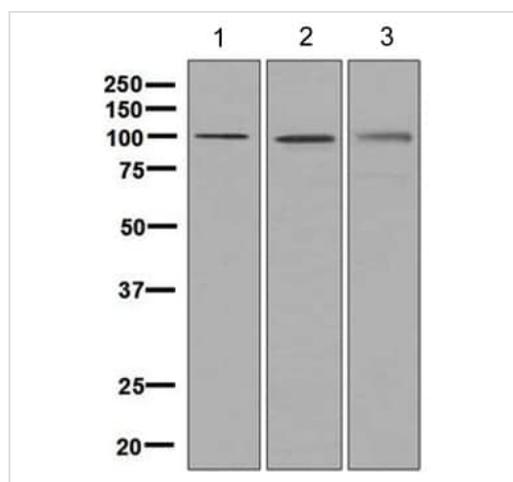
Western blot - Anti-Nucleolin antibody [EPR7952]
(ab129200)

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
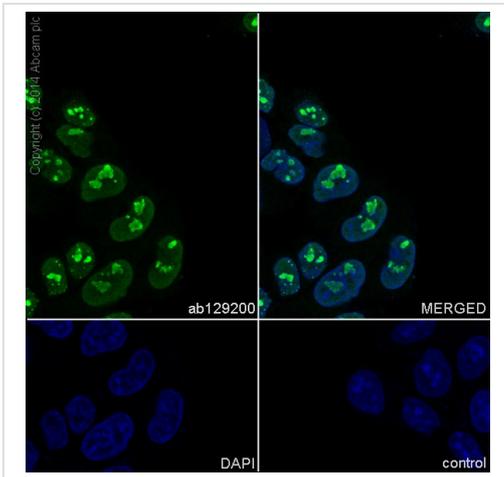
Lysates/proteins at 10 µg per lane.

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 - Anti-Nucleolin antibody [EPR7952] (ab129200)

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.
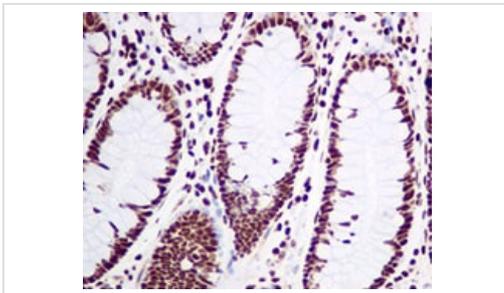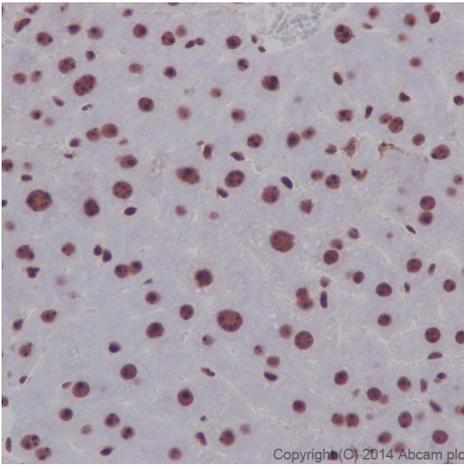

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nucleolin antibody [EPR7952] (ab129200)

ab129200, at 1/250 dilution, staining Nucleolin in paraffin-embedded Human colon tissue by Immunohistochemistry.
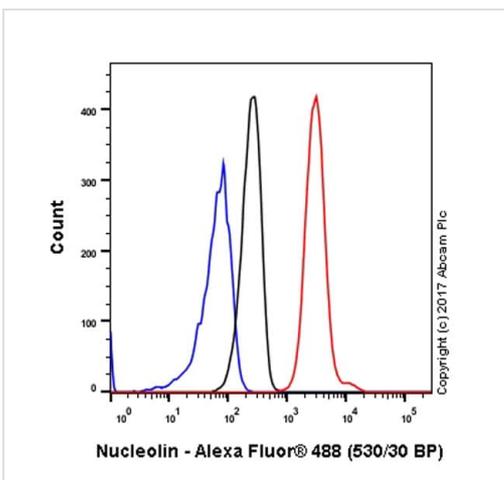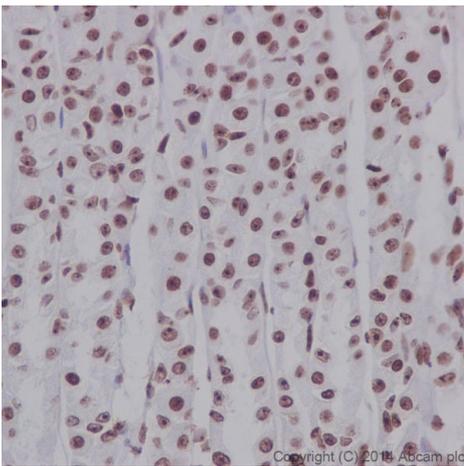

Flow Cytometry - Anti-Nucleolin antibody [EPR7952] (ab129200)

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) - Anti-Nucleolin antibody [EPR7952] (ab129200)

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) - Anti-Nucleolin antibody [EPR7952] (ab129200)

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.
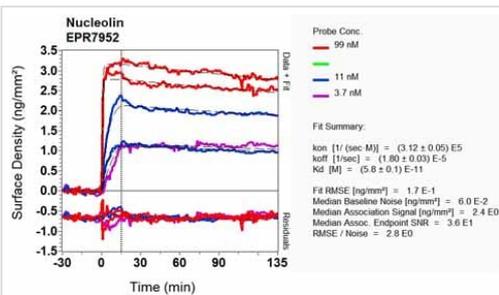
OI-RD Scanning - Anti-Nucleolin antibody [EPR7952] (ab129200)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

Anti-Nucleolin antibody [EPR7952] (ab129200)

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