abcam

Product datasheet

Anti-Matrin 3 antibody [EPR10635(B)] ab151714

KO VALIDATED Recombinant RabMAb

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Overview

Product name	Anti-Matrin 3 antibody [EPR10635(B)]
Description	Rabbit monoclonal [EPR10635(B)] to Matrin 3
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HEK293T, K562, HeLa and HepG2 whole cell lysate (**ab7900**); Human brain tissue, Human colon tissue and Human breast carcinoma tissue; Mouse and rat liver tissue, Mouse and Rat brain tissue 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	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10635(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab151714 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)		1/220.
WB	★★★☆☆ **(2)**	1/10000 - 1/50000. Predicted molecular weight: 95 kDa.
IHC-P		1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. **For unpurified use at 1/250 - 1/500.**
ICC/IF	★★★★☆ **(1)**	1/250 - 1/500.

Target

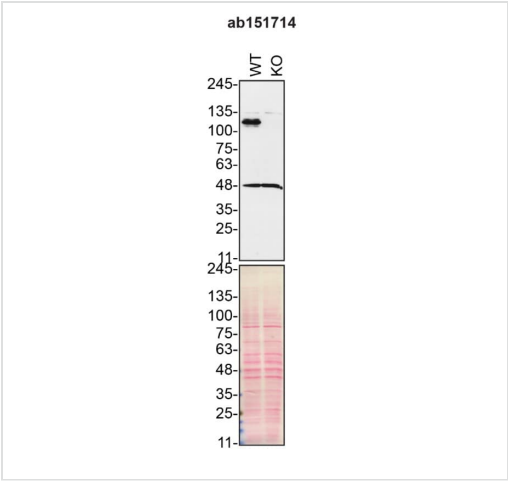
Function May play a role in transcription or may interact with other nuclear matrix proteins to form the internal fibrogranular network. In association with the SFPQ-NONO heteromer may play a role in nuclear retention of defective RNAs.

Involvement in disease Defects in MATR3 are the cause of myopathy distal type 2 (MPD2) [MIM:606070]; also called vocal cord and pharyngeal dysfunction with distal myopathy (VCPDM). MPD2 is a muscular disorder characterized by distal weakness, with onset in hands and feet, associated with vocal cord and pharyngeal weakness causing a nasal voice and swallowing disorders.

Sequence similarities Contains 1 matrin-type zinc finger.
Contains 2 RRM (RNA recognition motif) domains.

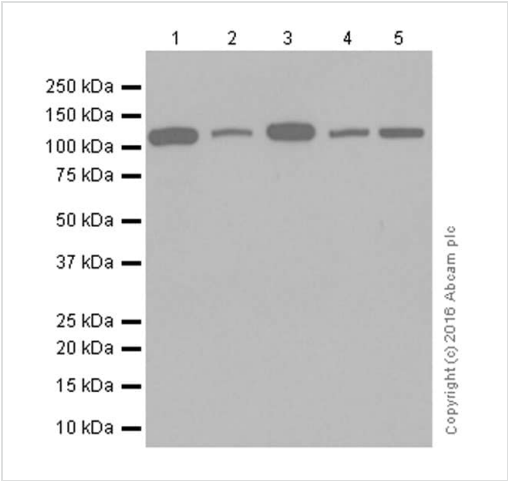
Cellular localization Nucleus matrix.

Images



Western blot - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

ab151714 was shown to react with MATR3 in wild-type HAP1 cells in Western blot with loss of signal observed in a MATR3 knockout cell line. Wild-type HAP1 and MATR3 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with ab151714 overnight at 4 °C at a 1/10000 dilution. Blots were incubated with goat anti-rabbit HRP secondary antibodies at 0.2 µg/ml before imaging. These data were provided by YCharOS Inc., an open science company with the mission of characterizing commercially available antibody reagents for all human proteins. Abcam and YCharOS are working together to help address the reproducibility crisis by enabling the life science community to better evaluate commercially available antibodies.



Western blot - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

All lanes : Anti-Matrin 3 antibody [EPR10635(B)] (ab151714) at 1/10000 dilution (purified)

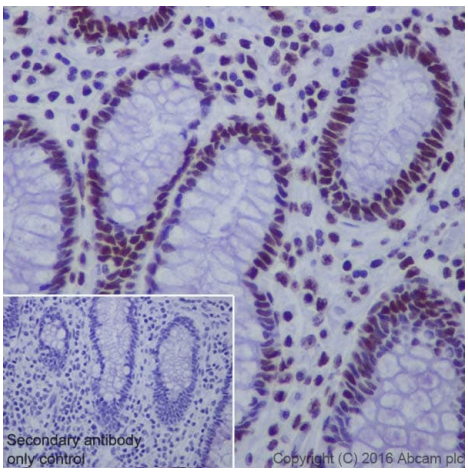
Lane 1 : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate
Lane 2 : K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate
Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 4 : Mouse brain tissue lysate
Lane 5 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

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

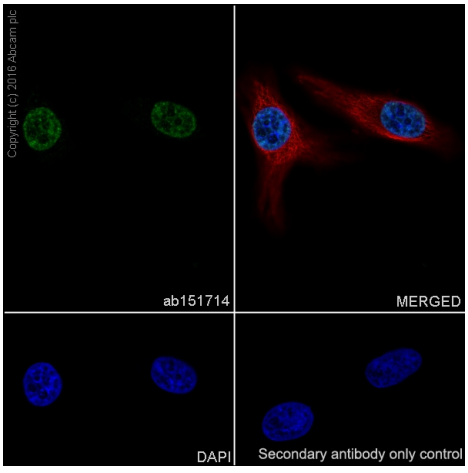
Predicted band size: 95 kDa
Observed band size: 125 kDa

Blocking/Diluting buffer 5% NFDM/TBST



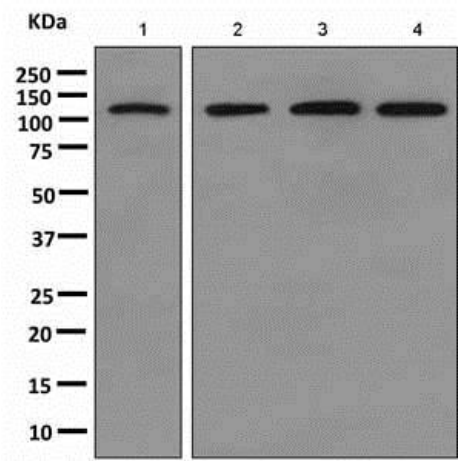
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Immunohistochemical analysis of paraffin-embedded human colon tissue sections labeling Matrin 3 with purified ab151714 at a dilution of 1/2000 (0.7 µg/ml). **ab97051** Goat Anti-Rabbit IgG H&L (HRP) at 1/500 was used as the secondary anitbody. Sections were counterstained with hematoxylin. Antigen retrieval was heat mediated using citrate Buffer, pH 6.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Matrin 3 with purified ab151714 at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. **ab150077**, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Cells were counter-stained with **ab195889** Anti-Alpha Tubulin antibody [DM1A] (1/200, 2.5 µg/mL) - Microtubule Marker (Alexa Fluor® 594) at 1/200. DAPI (blue) was used as a nuclear counterstain. Secondary Only Control: PBS was used instead of the primary antibody as the negative control.



Western blot - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

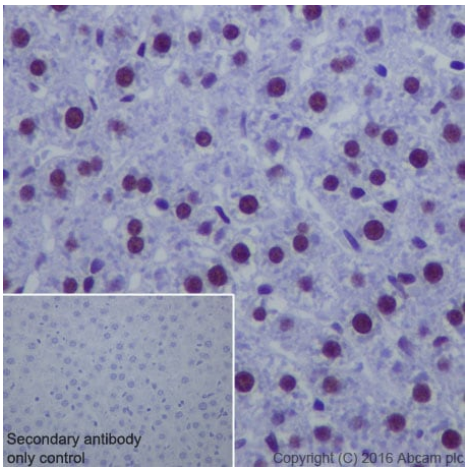
All lanes : Anti-Matrin 3 antibody [EPR10635(B)] (ab151714) at 1/1000 dilution (unpurified)

Lane 1 : HEK293T cell lysate
Lane 2 : K562 cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

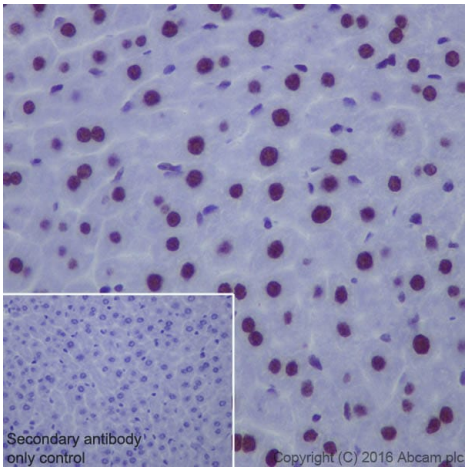
Secondary
All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 95 kDa



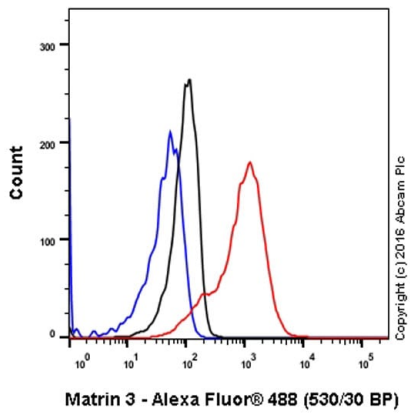
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Immunohistochemical analysis of Paraffin-embedded rat liver tissue sections labeling Matrin 3 with purified ab151714 at a dilution of 1/2000 (0.7 µg/ml). **ab97051** Goat Anti-Rabbit IgG H&L (HRP) at 1/500 was used as the secondary anitbody. Sections were counterstained with hematoxylin. Antigen retrieval was heat mediated using citrate Buffer, pH 6.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

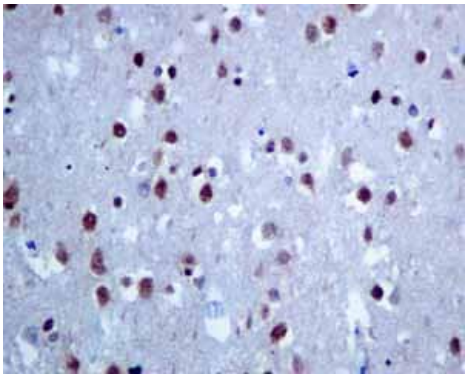
Immunohistochemical analysis of paraffin-embedded mouse liver tissue sections labeling Matrin 3 with purified ab151714 at a dilution of 1/2000 (0.7 µg/ml). **ab97051** Goat Anti-Rabbit IgG H&L (HRP) at 1/500 was used as the secondary anitbody. Sections were counterstained with hematoxylin. Antigen retrieval was heat mediated using citrate Buffer, pH 6.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Flow Cytometry (Intracellular) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Intracellular Flow Cytometry analysis of 4%paraformaldehyde fixedHepG2 (human hepatocellular carcinoma) cells labeling Matrin 3 with purified ab151714 at a dilution of 1/220. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

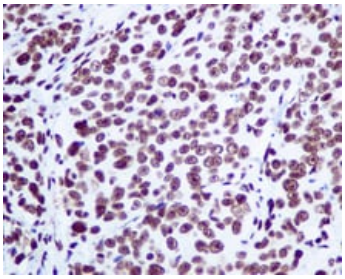
Isoytype control: Rabbit monoclonal IgG (Black)Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Immunohistochemical analysis of paraffin-embedded Human brain tissue labeling Matrin 3 with unpurified ab151714 at 1/250 dilution.

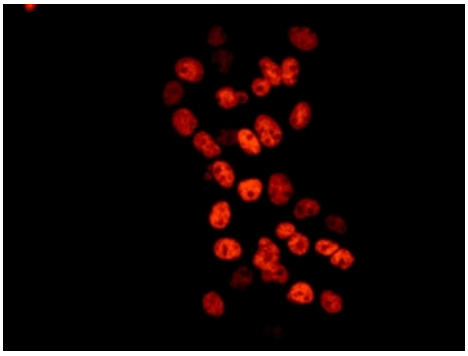
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

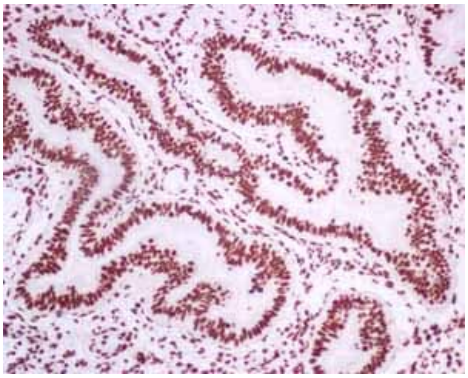
Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling Matrin 3 with unpurified ab151714 at 1/250 dilution.

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



Immunocytochemistry/ Immunofluorescence - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

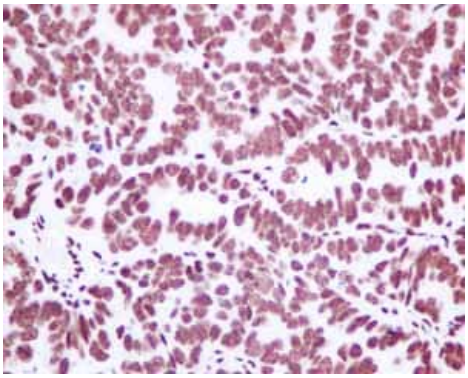
Immunofluorescent analysis of HepG2 cells labeling Matrin 3 with unpurified ab151714 at 1/250 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Immunohistochemical analysis of paraffin embedded normal Human uterus tissue using unpurified ab151714 showing +ve staining.

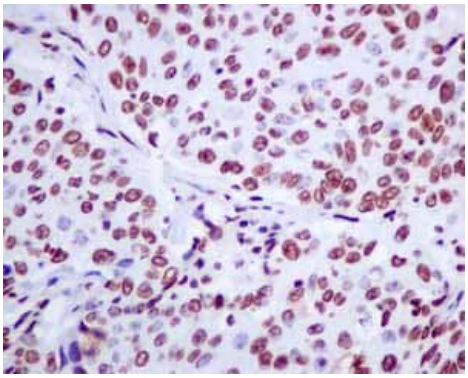
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Immunohistochemical analysis of paraffin embedded Human Ovarian carcinoma tissue using unpurified ab151714 showing +ve staining.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

Immunohistochemical analysis of paraffin embedded Human Lung carcinoma tissue using unpurified ab151714 showing +ve staining.

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

Anti-Matrin 3 antibody [EPR10635(B)] (ab151714)

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