abcam

Product datasheet

Anti-Importin 9/RANBP9 antibody [EPR1352] ab124710





2 References 5 Images

Overview

Product name Anti-Importin 9/RANBP9 antibody [EPR1352]

Rabbit monoclonal [EPR1352] to Importin 9/RANBP9 **Description**

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Mouse, Rat, Human

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. **Immunogen**

Positive control HeLa, SKBR-3, C6, and NIH/3T3 cell lysates and Human brain tissue.

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.

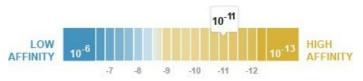
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form Liquid

Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. Storage instructions

Dissociation constant (K_D) $K_D = 2.29 \times 10^{-11} M$



Learn more about K_D

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture

supernatant

Purity Protein A purified

ClonalityMonoclonalClone numberEPR1352

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab124710 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		1/1000 - 1/10000. Predicted molecular weight: 116 kDa.
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Application notes

Is unsuitable for Flow Cyt or IP.

Target

Function

Functions in nuclear protein import as nuclear transport receptor. Serves as receptor for nuclear localization signals (NLS) in cargo substrates. Is thought to mediate docking of the importin/substrate complex to the nuclear pore complex (NPC) through binding to nucleoporin and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to the importin, the importin/substrate complex dissociates and importin is re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus (By similarity). Mediates the nuclear import of H2B histone (By similarity), RPS7 and RPL18A. Prevents the cytoplasmic aggregation of RPS7 and RPL18A by shielding exposed basic domains. May also import H2A, H3, H4 histones (By similarity), RPL4 and RPL6.

Sequence similarities

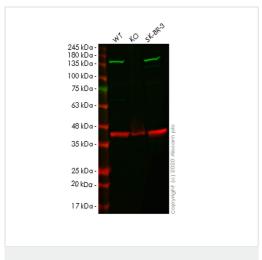
Belongs to the importin beta family.

Contains 1 importin N-terminal domain.

Cellular localization

Cytoplasm. Nucleus.

Images



Western blot - Anti-Importin 9/RANBP9 antibody [EPR1352] (ab124710)

All lanes : Anti-Importin 9/RANBP9 antibody [EPR1352] (ab124710) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: IPO9 knockout HeLa cell lysate

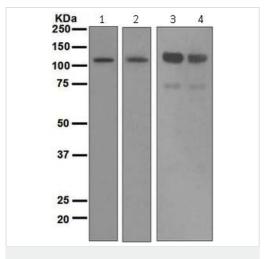
Lane 3: SK-BR-3 cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 116 kDa

Lanes 1-3: Merged signal (red and green). Green - ab124710. Red - loading control, <u>ab8245</u> observed at 36 kDa.

ab124710 was shown to react with IPO9 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab265352 (knockout cell lysate ab257483) was used. Wild-type and IPO9 knockout samples were subjected to SDS-PAGE. ab124710 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Importin 9/RANBP9 antibody [EPR1352] (ab124710)

All lanes : Anti-Importin 9/RANBP9 antibody [EPR1352] (ab124710) at 1/1000 dilution

Lane 1: HeLa cell lysate

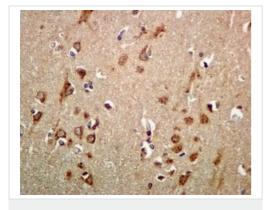
Lane 2: SKBR-3 cell lysate

Lane 3: C6 cell lysate

Lane 4: NIH/3T3 cell lysate

Lysates/proteins at 10 µg per lane.

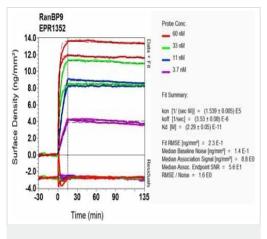
Predicted band size: 116 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Importin 9/RANBP9 antibody [EPR1352] (ab124710)

ab124710, at 1/500 to 1/1000, staining Impotin 9/RANBP9 in Human brain tissue by immunohistochemistry [Paraffin Embedded Tissues (IHC-P)].

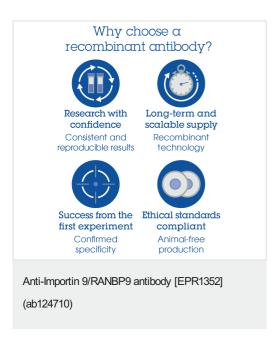
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Importin 9/RANBP9 antibody [EPR1352] (ab124710)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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