


## Product datasheet

### Anti-Importin 9/RANBP9 antibody [EP1353Y] $\alpha$ b52605

KO **VALIDATED** Recombinant RabMAb

★★★★★ [2 Abreviews](#) [10 References](#) [5 Images](#)

#### Overview

<b>Product name</b>	Anti-Importin 9/RANBP9 antibody [EP1353Y]
<b>Description</b>	Rabbit monoclonal [EP1353Y] to Importin 9/RANBP9
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse 
<b>Immunogen</b>	Synthetic peptide within Human Importin 9/RANBP9 aa 1000 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <a href="#">Q96P70</a>
<b>Positive control</b>	WB: HeLa and SK-BR-3 cell lysates; Fetal brain lysate. IHC-P: Human lymphoma tissue.
<b>General notes</b>	<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> <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 <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP1353Y
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab52605 in the following tested applications.

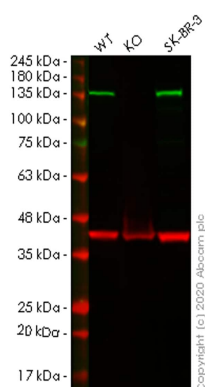
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>	★★★★★ (1)	1/1000. Detects a band of approximately 115 kDa (predicted molecular weight: 115 kDa).
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
<b>Flow Cyt (Intra)</b>		1/1000. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

## Target

<b>Function</b>	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.
<b>Sequence similarities</b>	Belongs to the importin beta family. Contains 1 importin N-terminal domain.
<b>Cellular localization</b>	Cytoplasm. Nucleus.

## Images



Western blot - Anti-Importin 9/RANBP9 antibody [EP1353Y] (ab52605)

**All lanes :** Anti-Importin 9/RANBP9 antibody [EP1353Y] (ab52605) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** IPO9 knockout HeLa cell lysate

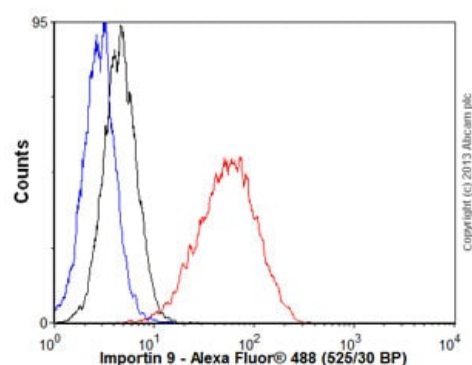
**Lane 3 :** SK-BR-3 cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 115 kDa

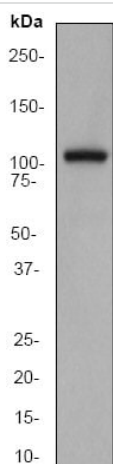
**Lanes 1-3:** Merged signal (red and green). Green - ab52605. Red - loading control, **ab8245** observed at 36 kDa.

ab52605 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. ab52605 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.



Flow Cytometry (Intracellular) - Anti-Importin 9/RANBP9 antibody [EP1353Y] (ab52605)

Overlay histogram showing HeLa cells stained with ab52605 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab52605, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1 µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



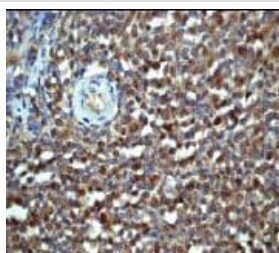
Western blot - Anti-Importin 9/RANBP9 antibody [EP1353Y] (ab52605)

Anti-Importin 9/RANBP9 antibody [EP1353Y] (ab52605) at 1/1000 dilution + Fetal brain lysate at 10 µg

### Secondary

HRP-labelled goat anti-rabbit. at 1/2000 dilution

**Predicted band size:** 115 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Importin 9/RANBP9 antibody [EP1353Y] (ab52605)

Immunohistochemical staining of paraffin-embedded human lymphoma using ab52605 at a dilution of 1/50.

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

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Importin 9/RANBP9 antibody [EP1353Y] (ab52605)

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