

Importin 9 / RANBP9 Antibody Rabbit mAb Catalog # AP92894

#### **Specification**

Calculated MW

## Importin 9 / RANBP9 Antibody - Product Information

Application Primary Accession Clonality <b>Other Names</b> Imp9; Imp9a; Imp9b; Ipo9; RanBP9;	WB, IHC <u>Q96P70</u> Monoclonal
lsotype	Rabbit IgG
Host	Rabbit

## Importin 9 / RANBP9 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human Importin 9 / RANBP9
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

115963 Da

#### Importin 9 / RANBP9 Antibody - Protein Information

Name IPO9 {ECO:0000303|PubMed:30855230, ECO:0000312|HGNC:HGNC:19425}

Function

Nuclear transport receptor that mediates nuclear import of proteins, such as histones, proteasome and actin (PubMed:<a href="http://www.uniprot.org/citations/11823430" target="\_blank">11823430</a>, PubMed:<a href="http://www.uniprot.org/citations/30855230" target="\_blank">30855230</a>, PubMed:<a href="http://www.uniprot.org/citations/34711951" target="\_blank">34711951</a>). Serves as receptor for nuclear localization signals (NLS) in



cargo substrates (PubMed:<a href="http://www.uniprot.org/citations/11823430" target=" blank">11823430</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/11823430" target=" blank">11823430</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/11823430" target=" blank">11823430</a>). 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 (PubMed: <a href="http://www.uniprot.org/citations/11823430" target=" blank">11823430</a>). Mediates the import of pre-assembled proteasomes into the nucleus; AKIRIN2 acts as a molecular bridge between IPO9 and the proteasome complex (PubMed:<a href="http://www.uniprot.org/citations/11823430" target=" blank">11823430</a>, PubMed:<a href="http://www.uniprot.org/citations/34711951" target=" blank">34711951</a>). Mediates the nuclear import of histones H2A, H2B, H4 and H4 (PubMed: <a href="http://www.uniprot.org/citations/11823430" target=" blank">11823430</a>, PubMed:<a href="http://www.uniprot.org/citations/30855230" target=" blank">30855230</a>). In addition to nuclear import, also acts as a chaperone for histones by preventing inappropriate non-nucleosomal interactions (PubMed:<a href="http://www.uniprot.org/citations/30855230" target=" blank">30855230</a>). Mediates the nuclear import of actin (By similarity).

Cellular Location Cytoplasm. Nucleus

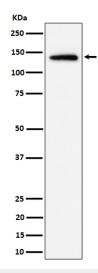
# Importin 9 / RANBP9 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Importin 9 / RANBP9 Antibody - Images





Western blot analysis of Importin 9 / RANBP9 expression in HeLa cell lysate.