

Importin 9 / RANBP9 Antibody

Rabbit mAb Catalog # AP92894

Specification

Importin 9 / RANBP9 Antibody - Product Information

Application WB, IHC
Primary Accession Q96P70
Clonality Monoclonal

Other Names

Imp9; Imp9a; Imp9b; Ipo9; RanBP9;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 115963 Da

Importin 9 / RANBP9 Antibody - Additional Information

Dilution WB~~1:1000

Purification IHC~~1:100~500
Affinity-chromato

Purification Affinity-chromatography
Immunogen 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.

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:11823430, PubMed:30855230, PubMed:34711951). Serves as receptor for nuclear localization signals (NLS) in



cargo substrates (PubMed:11823430). 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:11823430). 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:11823430). 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: 11823430). Mediates the import of pre-assembled proteasomes into the nucleus; AKIRIN2 acts as a molecular bridge between IPO9 and the proteasome complex (PubMed:11823430, PubMed: 34711951). Mediates the nuclear import of histones H2A, H2B, H4 and H4 (PubMed: 11823430, PubMed:30855230). In addition to nuclear import, also acts as a chaperone for histones by preventing inappropriate non-nucleosomal interactions (PubMed: 30855230). 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.

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

Importin 9 / RANBP9 Antibody - Images



