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KD-Validated Anti-Importin 9 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1546

Specification

KD-Validated Anti-Importin 9 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q96P70
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 116 kDa , observed , 140 kDa KDa**
Gene Name	**IPO9**
Aliases	**IPO9; Importin 9; Imp9; Ran-Binding Protein 9; Importin-9; FLJ10402; RanBP9; IMP9; KIAA1192; RANBP9**
Immunogen	**A synthesized peptide derived from human Importin 9 / RANBP9**

KD-Validated Anti-Importin 9 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**55705**

Other Names
Importin-9, Imp9, Ran-binding protein 9, RanBP9, IPO9 {ECO:0000303|PubMed:30855230, ECO:0000312|HGNC:HGNC:19425}

KD-Validated Anti-Importin 9 Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/11823430"

target="_blank">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).

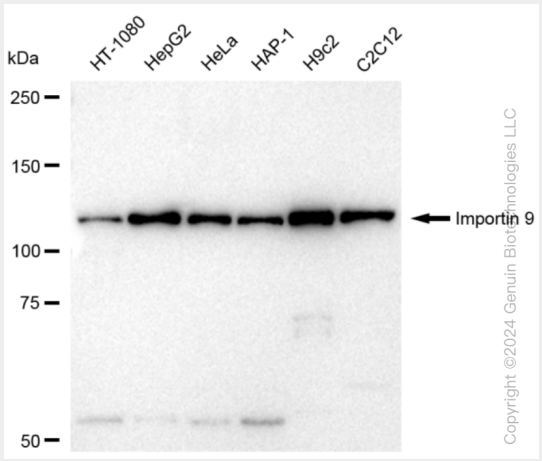
Cellular Location
Cytoplasm. Nucleus

KD-Validated Anti-Importin 9 Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Importin 9 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Importin 9 antibody (Cat#AGI1546). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Importin 9 antibody (Cat#AGI1546, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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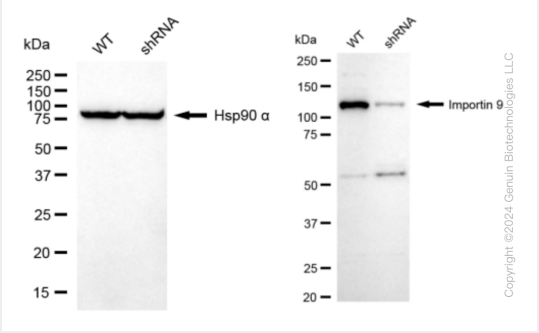
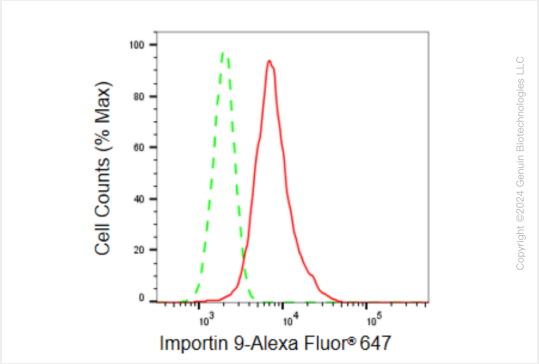


Western blotting analysis using anti-Importin 9 antibody (Cat#AGI1546). Importin 9 expression in wild type (WT) and Importin 9 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Importin 9 antibody (Cat#AGI1546, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Importin 9 expression in HepG2 cells using Importin 9 antibody (Cat#AGI1546, 1:2,000). Green, isotype control; red, Importin 9.