



Rabbit Anti-Transportin 1 antibody

SL9009R

Product Name:	Transportin 1
Chinese Name:	Transporter1 抗体
Alias:	Importin 2; Importin beta 2; IPO 2; IPO2; Karyopherin (importin) beta 2; Karyopherin beta 2; KPN B2; KPNB 2; KPNB2; M9 interacting protein; M9 region interacting protein; M9 region interaction protein; M9-interacting protein; MIP 1; MIP; MIP1; TNPO 1; TNPO1; Transportin 1; Transportin; Transportin-1; Transportin1; TRN; TNPO1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	102kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Transportin 1:1-100/898
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Transportin 1 is the beta subunit of the karyopherin receptor complex which interacts with nuclear localization signals to target proteins to the nucleus. The karyopherin receptor complex is a heterodimer of an alpha subunit which recognizes the nuclear

localization signal and a beta subunit which docks the complex at nucleoporins. Alternate splicing of this gene results in two transcript variants encoding different proteins. In cases of HIV-1 infections, transportin 1 is known to bind and mediate the nuclear import of HIV-1 Rev.

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). Involved in nuclear import of M9-containing proteins. In vitro, binds directly to the M9 region of the heterogeneous nuclear ribonucleoproteins (hnRNP), A1 and A2 and mediates their nuclear import. Appears also to be involved in hnRNP A1/A2 nuclear export. Mediates the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5. Binds to a beta-like import receptor binding (BIB) domain of RPL23A. In vitro, mediates nuclear import of H2A, H2B, H3 and H4 histones, and SRP19. In case of HIV-1 infection, binds and mediates the nuclear import of HIV-1 Rev.

Subunit:

Binds HNRPA1, HNRPA2, HNRPDL, RPL23A, RPS7, RPL5, RAN and SRP19. Interacts with H2A, H2B, H3 and H4 histones. Binds to HIV-1 Rev.

Subcellular Location:

Cytoplasm. Nucleus.

Similarity:

Belongs to the importin beta family.
Contains 8 HEAT repeats.
Contains 1 importin N-terminal domain.

SWISS:

Q92973

Gene ID:

3842

Database links:

[Entrez Gene: 3842](#) Human

[Entrez Gene: 238799](#) Mouse

[Omim: 602901](#) Human

[SwissProt: Q92973](#) Human

[SwissProt: Q8BFY9](#) Mouse

[Unigene: 482497](#) Human

[Unigene: 173286](#) Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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