

Rabbit Transportin 1 Polyclonal Antibody | anti-TNPO1 antibody

Transportin 1 Antibody

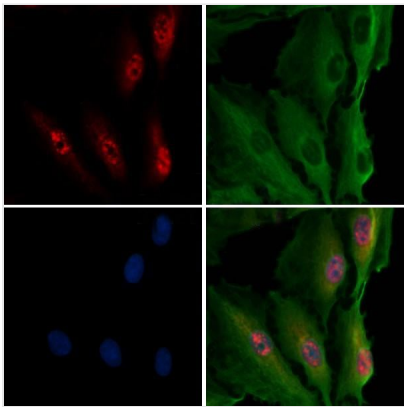
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328918	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(100%), Xenopus(100%)	ELISA

PRODUCT SYNONYMS

Transportin 1; Polyclonal Antibody; Transportin 1 Antibody; Importin 2; Importin beta 2; Importin beta-2; IPO 2; IPO2; Karyopherin (importin) beta 2; Karyopherin beta 2; Karyopherin beta-2; KPN B2; KPNB 2; KPNB2; M9 interacting protein; M9 region interacting protein; M9 region interaction protein; MIP 1; MIP; MIP1; OTTHUMP00000126960; OTTHUMP00000222024; OTTHUMP00000226224; TNPO 1; Tnp01; TNPO1_HUMAN; Transportin; Transportin-1; Transportin1; TRN; anti-TNPO1 antibody

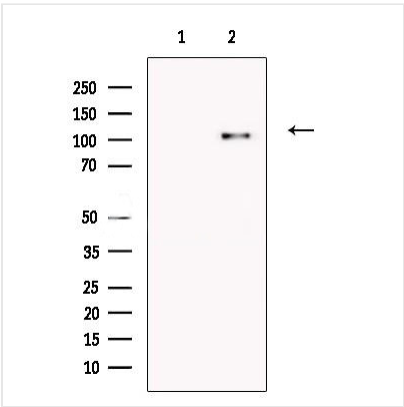
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(100%), Xenopus(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	Transportin 1 Antibody detects endogenous levels of total Transportin 1.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	898
Applicable Applications for anti-TNPO1 antibody	ELISA
Immunogen	A synthesized peptide derived from human Transportin 1, corresponding to a region within C-terminal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IF (Immunofluorescence)

AAA328918 staining A549 cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA328918) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI (blue).



WB (Western Blot)

Western blot analysis of extracts from HeLa cells, using Transportin 1 Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-TNPO1 antibody

Function: Functions in nuclear protein import as nuclear transport receptor. Serves as receptor for nuclear localization signals (NLS) in cargo substrates (PubMed:24753571). 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 (By similarity). Mediates nuclear import of ADAR/ADAR1 isoform 1 and isoform 5 in a RanGTP-dependent manner (PubMed:19124606, PubMed:24753571).(Microbial infection) In case of HIV-1 infection, binds and mediates the nuclear import of HIV-1 Rev.

Subcellular Location: Cytoplasm. Nucleus.

Subunit Structure: Identified in a complex that contains TNPO1, RAN and RANBP1 (PubMed:9428644). Binds HNRPA1, HNRPA2, HNRNPDL, RPL23A, RPS7, RPL5, RAN and SRP19. Interacts with H2A, H2B, H3 and H4 histones (By similarity). Interacts with isoform 1 and isoform 5 of ADAR/ADAR1 (via DRBM 3 domain) (PubMed:19124606, PubMed:24753571). Interacts with SNAI1 (via zinc fingers); the interaction mediates SNAI1 nuclear import (PubMed:19386897). Interacts with SNAI2 (via zinc fingers) (PubMed:19386897).(Microbial infection) Binds to HIV-1 Rev.

Similarity: Belongs to the importin beta family. Importin beta-2 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	133925811
NCBI GeneID	3842
NCBI Accession #	NP_002261.3
NCBI GenBank Nucleotide #	NP_002261.3
UniProt Accession #	Q92973

Molecular Weight	Observed Molecular Weight: (Observed)102kD. Predicted Molecular Weight: (Calculated)102kDa.
NCBI Official Full Name	transportin-1 isoform 1
NCBI Official Synonym Full Names	transportin 1
NCBI Official Symbol	TNPO1
NCBI Official Synonym Symbols	MIP; TRN; IPO2; MIP1; KPNB2
NCBI Protein Information	transportin-1
UniProt Protein Name	Transportin-1
UniProt Gene Name	TNPO1
UniProt Synonym Gene Names	KPNB2; MIP1; TRN; MIP
UniProt Entry Name	TNPO1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/transportin-1-antibody-elisa/328918>