SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-NTF97 antibody

SL3695R

Product Name:	NTF97
Chinese Name:	亲核素β1抗体
Alias:	IMB 1; IMB1; Impnb; Importin 90; Importin beta 1; Importin beta 1 subunit; IPOB; Karyopherin beta 1; Karyopherin beta 1 subunit; KPNB 1; KPNB1; MGC2155; MGC2156; MGC2157; NTF 97; NTF97; Nuclear factor p97; IMB1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	97kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NTF97/KPNB1:165-270/876
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:	NTF97 is involved in nuclear protein import, either by associating itself with an adapter protein (for example, importin-alpha subunit which binds to nuclear localization signals (NLS) in cargo substrates), or by acting autonomously as a nuclear transport receptor (serves as NLS receptor, docking of the importin/substrate complex to the nuclear pore complex).

Function:
Functions in nuclear protein import, either in association with an adapter protein, like an importin-alpha subunit, which binds to nuclear localization signals (NLS) in cargo substrates, or by acting as autonomous nuclear transport receptor. Acting autonomously, serves itself as NLS receptor. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats 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 importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. 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. Mediates autonomously the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5. Binds to a beta-like import receptor binding (BIB) domain of RPL23A. In association with IPO7 mediates the nuclear import of H1 histone. In vitro, mediates nuclear import of H2A, H2B, H3 and H4 histones. In case of HIV-1 infection, binds and mediates the nuclear import of HIV-1 Rev. Imports PRKCI into the nucleus.

Subunit:
Forms a complex with an importin alpha subunit. Forms a heterodimer with IPO7. Interacts with IPO7, SNUPN, RPL23A and XPO1. The KPNB1/IPO7 heterodimer interacts with H1 histone. Interacts with H2A, H2B, H3 and H4 histones (By similarity). Component of an import snRNP complex composed of KPNB1, SNUPN, SMN1 and ZNF259. Component of a nuclear export receptor complex composed of KPNB1, Ran, SNUPN and XPO1. Binds to HIV-1 Rev and Tat. Interacts with HTLV-1 Rex. Interacts with SRY. Interacts with PRKCI/atypical protein kinase C iota. Interacts with human respiratory syncytial virus (HRSV) protein M. Interacts with KPNA7.

Subcellular Location:
Cytoplasm. Nucleus envelope.

Post-translational modifications:
Mono-ADP-ribosylated by PARP16.

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

SWISS:
Q14974

Gene ID:
3837

Database links:

Entrez Gene: 491042Dog

Entrez Gene: 3837Human

Entrez Gene: 16211Mouse

Entrez Gene: 24917Rat

Omim: 602738Human

SwissProt: Q14974Human

SwissProt: P70168Mouse

SwissProt: P52296Rat

Unigene: 532793Human

Unigene: 706168Human

Unigene: 251013Mouse

Unigene: 11061Rat

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

Karyopherin是一类与核孔选择性运输有关的蛋白家族，相当于受体蛋白参与胞核胞质运输，信号和能源依赖的过程。