

IPO5 / RANBP5 Antibody (clone 1C4)
Mouse Monoclonal Antibody
Catalog # ALS14394**Specification**

IPO5 / RANBP5 Antibody (clone 1C4) - Product Information

Application	WB, IHC
Primary Accession	O00410
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	124kDa KDa

IPO5 / RANBP5 Antibody (clone 1C4) - Additional Information**Gene ID** 3843**Other Names**

Importin-5, Imp5, Importin subunit beta-3, Karyopherin beta-3, Ran-binding protein 5, RanBP5, IPO5, KPNB3, RANBP5

Target/Specificity

Human Importin 5

Reconstitution & Storage

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions

IPO5 / RANBP5 Antibody (clone 1C4) is for research use only and not for use in diagnostic or therapeutic procedures.

IPO5 / RANBP5 Antibody (clone 1C4) - Protein Information**Name** IPO5**Synonyms** KPNB3, RANBP5**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). Mediates the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5 (PubMed: <http://www.uniprot.org/citations/9687515>)

target="_blank">9687515, PubMed:11682607). In vitro, mediates nuclear import of H2A, H2B, H3 and H4 histones. Binds to CPEB3 and mediates its nuclear import following neuronal stimulation (By similarity). In case of HIV-1 infection, binds and mediates the nuclear import of HIV-1 Rev.

Cellular Location

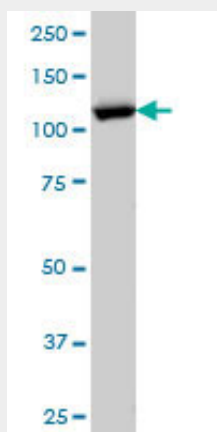
Cytoplasm. Nucleus, nucleolus. Note=Nucleus; nuclear rim. Found particularly in the nuclear rim and nucleolus

IPO5 / RANBP5 Antibody (clone 1C4) - Protocols

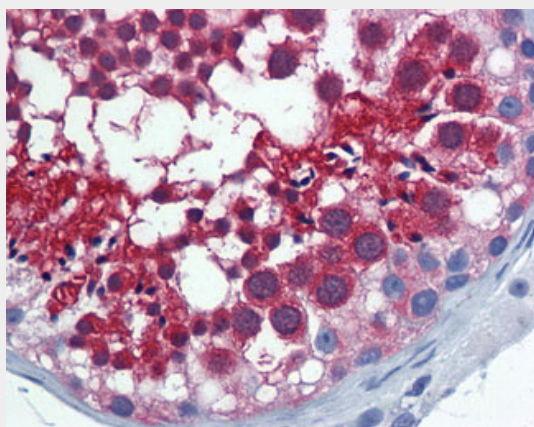
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IPO5 / RANBP5 Antibody (clone 1C4) - Images



Western blot of IPO5 expression in HeLa cell lysate.



Anti-IPO5 / Importin 5 antibody IHC of human testis.

IPO5 / RANBP5 Antibody (clone 1C4) - Background

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). 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. In case of HIV-1 infection, binds and mediates the nuclear import of HIV-1 Rev.

IPO5 / RANBP5 Antibody (clone 1C4) - References

Yaseen N.R.,et al.Proc. Natl. Acad. Sci. U.S.A. 94:4451-4456(1997).
Deane R.,et al.Mol. Cell. Biol. 17:5087-5096(1997).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Dunham A.,et al.Nature 428:522-528(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.