

Mouse Anti-KPNA2/Karyopherin $\alpha 2$ [B9]: MC0013. MC0013RTU7

Intended Use: For Research Use Only

Description: KPNA2 (Karyopherin $\alpha 2$), a member of the importin alpha family, contains an N-terminal importin beta binding (IBB) motif followed by a hydrophobic region consisting of 10 armadillo repeats that function in binding to the nuclear localization signal (NLS) sites of cargo proteins. Two cytosolic factors centrally involved in the recognition and docking process are the karyopherin $\alpha 1$ and karyopherin $\beta 1$ subunits. Karyopherin $\alpha 1$ functions in the recognition and targeting of substrates destined for nuclear import, while karyopherin $\beta 1$ serves as an adapter, tethering the karyopherin $\alpha 1$ /substrate complex to docking proteins on the nuclear envelope termed nucleoporins. KPNA2 has been shown to complex with Epstein-Barr virus nuclear antigen 1 (EBNA1). Certain RNA-binding proteins are imported to the nucleus by karyopherin $\beta 2$, and karyopherin $\beta 3$ appears to be involved in the import of some ribosomal proteins. Research studies indicate that KPNA2 promotes cell proliferation and tumorigenesis. Research studies have also shown that up-regulation of KPNA2 is associated with cancer progression. Therefore, it has become a focus of biomarker research.

Specifications

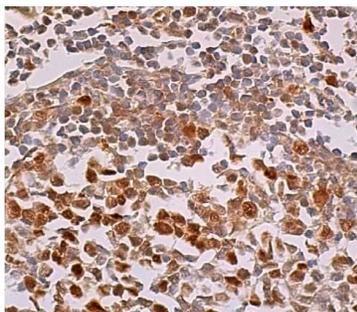
Clone:	B9
Source:	Mouse
Isotype:	IgG2b/k
Reactivity:	Human, mouse, rat
Immunogen:	Human KPNA2 aa 480-529
Localization:	Cytoplasm, nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ICC/IF, IP, WB
Package:	

Description	Catalog No.	Size
KPNA2/Karyopherin $\alpha 2$ Concentrated	MC0013	1 ml
KPNA2/Karyopherin $\alpha 2$ Prediluted	MC0013RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Tonsil, testis, bladder carcinoma
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human tonsil stained with anti-KPNA2 using DAB

References:

1. Nano-Particles Carried by Multiple Dynein Motors Self-Regulate Their Number of Actively Participating Motors. Gal Halbi, et al. Int J Mol Sci. Aug 18;22(16):8893, 2021.
2. Accumulation of nuclear ADAR2 regulates adenosine-to-inosine RNA editing during neuronal development. Mikaela Behm, et al. J Cell Sci. Feb 15;130(4):745-753, 2017.

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