

RANBP5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RANBP5. Catalog # AT3561a

Product Information

Application WB, IHC, E
Primary Accession O00410
Other Accession BC001497

Reactivity Human, Mouse, Rat

HostmouseClonalitymonoclonalIsotypeIgG1 Kappa

Clone Names 1C4 Calculated MW 123630

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 RANBP5 (AAH01497, 1 a.a. ~ 100 a.a) partial recombinant protein with GST

tag. MW of the GST tag alone is 26 KDa.

Dilution WB~~1:500~1000 IHC~~1:100~500 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions RANBP5 Antibody (monoclonal) (M01) is for research use only and not for use

in diagnostic or therapeutic procedures.

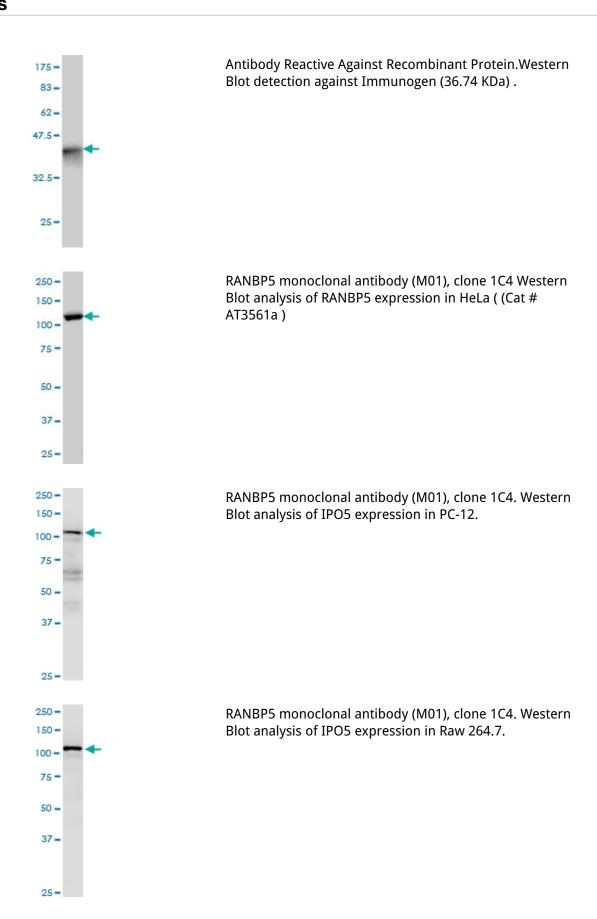
Background

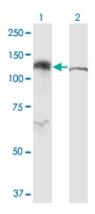
Nucleocytoplasmic transport, a signal- and energy-dependent process, takes place through nuclear pore complexes embedded in the nuclear envelope. The import of proteins containing a nuclear localization signal (NLS) requires the NLS import receptor, a heterodimer of importin alpha and beta subunits also known as karyopherins. Importin alpha binds the NLS-containing cargo in the cytoplasm and importin beta docks the complex at the cytoplasmic side of the nuclear pore complex. In the presence of nucleoside triphosphates and the small GTP binding protein Ran, the complex moves into the nuclear pore complex and the importin subunits dissociate. Importin alpha enters the nucleoplasm with its passenger protein and importin beta remains at the pore. Interactions between importin beta and the FG repeats of nucleoporins are essential in translocation through the pore complex. The protein encoded by this gene is a member of the importin beta family.

References

1.Localization of retinitis pigmentosa 2 to cilia is regulated by Importin {beta}2.Hurd TW, Fan S, Margolis BL.J Cell Sci. 2011 Mar 1;124(Pt 5):718-26. Epub 2011 Feb 1.

Images

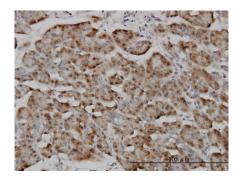




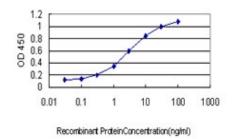
Western Blot analysis of IPO5 expression in transfected 293T cell line by RANBP5 monoclonal antibody (M01), clone 1C4.

Lane 1: IPO5 transfected lysate (Predicted MW: 125.6 KDa).

Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to RANBP5 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged RANBP5 is approximately 0.03ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.