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KPNA5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant KPNA5.
Catalog # AT2648a

Product Information

Application	WB, E
Primary Accession	O15131
Other Accession	BC047409
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1D2
Calculated MW	60666

Additional Information

Gene ID	3841
Other Names	Importin subunit alpha-6, Karyopherin subunit alpha-5, KPNA5
Target/Specificity	KPNA5 (AAH47409.1, 1 a.a. ~ 539 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 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	KPNA5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

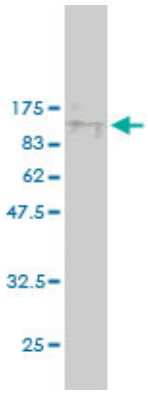
The transport of molecules between the nucleus and the cytoplasm in eukaryotic cells is mediated by the nuclear pore complex (NPC) which consists of 60-100 proteins and is probably 120 million daltons in molecular size. Small molecules (up to 70 kD) can pass through the nuclear pore by nonselective diffusion; larger molecules are transported by an active process. Most nuclear proteins contain short basic amino acid sequences known as nuclear localization signals (NLSs). KPNA5 protein belongs to the importin alpha protein family and is thought to be involved in NLS-dependent protein import into the nucleus.

References

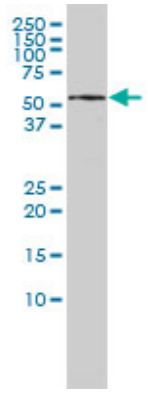
Probing the specificity of binding to the major nuclear localization sequence-binding site of importin-alpha

using oriented peptide library screening. Yang SN, et al. J Biol Chem, 2010 Jun 25. PMID 20406804.Plasmodium circumsporozoite protein promotes the development of the liver stages of the parasite. Singh AP, et al. Cell, 2007 Nov 2. PMID 17981117.Systematic analysis of the protein interaction network for the human transcription machinery reveals the identity of the 7SK capping enzyme. Jeronimo C, et al. Mol Cell, 2007 Jul 20. PMID 17643375.Breast cancer metastasis suppressor 1 (BRMS1) is stabilized by the Hsp90 chaperone. Hurst DR, et al. Biochem Biophys Res Commun, 2006 Oct 6. PMID 16919237.A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. Lim J, et al. Cell, 2006 May 19. PMID 16713569.

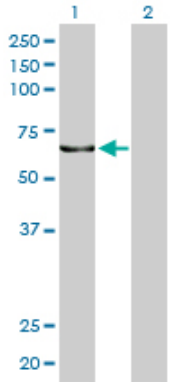
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (85.03 KDa) .

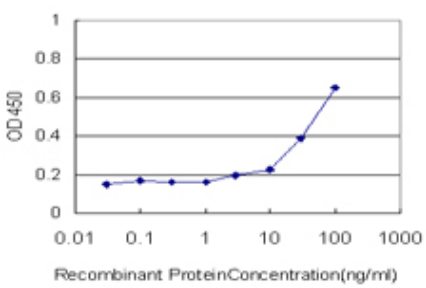


KPNA5 monoclonal antibody (M01), clone 1D2 Western Blot analysis of KPNA5 expression in HepG2 ((Cat # AT2648a)

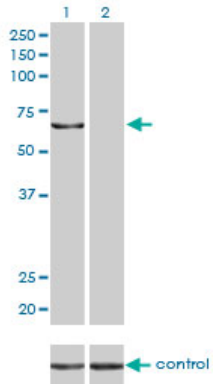


Western Blot analysis of KPNA5 expression in transfected 293T cell line by KPNA5 monoclonal antibody (M01), clone 1D2.

Lane 1: KPNA5 transfected lysate(60.7 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged KPNA5 is approximately 3ng/ml as a capture antibody.



Western blot analysis of KPNA5 over-expressed 293 cell line, cotransfected with KPNA5 Validated Chimera RNAi ((Cat # AT2648a)