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NUP54 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1830b

Product Information

Application	IHC-P, E
Primary Accession	Q7Z3B4
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,Igκ
Clone Names	139CT1.1.5
Calculated MW	55435

Additional Information

Gene ID	53371
Other Names	Nucleoporin p54, 54 kDa nucleoporin, NUP54
Target/Specificity	This NUP54 Monoclonal antibody is generated from mouse immunized with NUP54 recombinant protein.
Dilution	IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NUP54 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NUP54
Function	Component of the nuclear pore complex, a complex required for the trafficking across the nuclear membrane.
Cellular Location	Nucleus, nuclear pore complex {ECO:0000250|UniProtKB:P70582}. Nucleus membrane {ECO:0000250|UniProtKB:P70582}; Peripheral membrane protein {ECO:0000250|UniProtKB:P70582}; Cytoplasmic side {ECO:0000250|UniProtKB:P70582}. Nucleus membrane

{ECO:0000250|UniProtKB:P70582}; Peripheral membrane protein {ECO:0000250|UniProtKB:P70582}; Nucleoplasmic side {ECO:0000250|UniProtKB:P70582}. Note=Biased towards cytoplasmic side Central region of the nuclear pore complex, within the transporter {ECO:0000250|UniProtKB:P70582}

Background

The nuclear envelope creates distinct nuclear and cytoplasmic compartments in eukaryotic cells. It consists of two concentric membranes perforated by nuclear pores, large protein complexes that form aqueous channels to regulate the flow of macromolecules between the nucleus and the cytoplasm. These complexes are composed of at least 100 different polypeptide subunits, many of which belong to the nucleoporin family. This gene encodes a member of the phe-gly (FG) repeat-containing nucleoporin subset.

References

Towards a proteome-scale map of the human protein-protein interaction network. Rual JF, et al. Nature, 2005 Oct 20. PMID 16189514.
The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.
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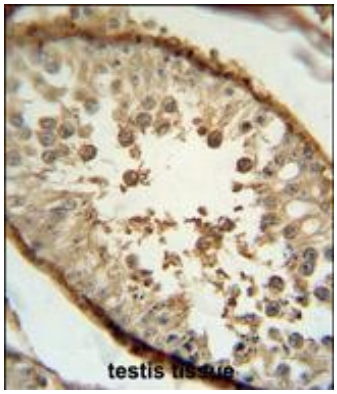
Docking of HIV-1 Vpr to the nuclear envelope is mediated by the interaction with the nucleoporin hCG1. Le Rouzic E, et al. J Biol Chem, 2002 Nov 22. PMID 12228227.

Images



NUP54 Monoclonal Antibody (Cat. #AM1830b) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the NUP54 Monoclonal Antibody for immunohistochemistry. Clinical relevance has not been evaluated.