

# NUP54 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM8685b

### **Product Information**

Application	WB, E
Primary Accession	<u>Q7Z3B4</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,Igк
Clone Names	139CT14.4.6
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	WB~~1:4000 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.

Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.

Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.

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



All lanes : Anti-NUP54 Antibody at 1:4000 dilution Lane 1: K562 whole cell lysate Lane 2: WiDr whole cell lysate Lane 3: MDA-MB-231 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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