

Anti-Nup62 antibody, rat monoclonal (2A11)

Product code	70-305
Size	200 µg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Recombinant human Nup62 (aa 1-300) (GST-Nup62-His)
Isotype	Rat IgG1κ
Reactivity	Specific to human (HeLa cells) and simian (Cos cells). The antibody did not react with mouse.
Special notes	N/A
Application	<ol style="list-style-type: none"> 1. Western blotting (1/500 ~1/2,000 dilution) 2. Immunoprecipitation (assay dependent) 3. Immunofluorescence / Immunocytochemistry (1/400) 4. ELISA (assay dependent) 5. When this antibody was micro-injected into the cytoplasm of the HeLa cells, it accumulates into the nuclear pores as examined by immunofluorescence staining.
Background	<p>The nuclear pore complex (NPC) regulates cargo transport between the cytoplasm and the nucleus. Nucleoporins are the main components of the NPC in eukaryotic cells. Nup (Nucleoporin) 62 (522 aa, 53 kDa) is a member of the FG-repeat containing nucleoporins and is localized to the NPC central plug. Nup62 associates with the importin alpha/beta complex which is involved in the import of proteins containing nuclear localization signals. Predicted to contain about 10 N-acetylglucosamine side chain.</p>
Data Link	UniProtKB P37198 (NUP62_HUMAN)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 70-305 Anti-Nup62 antibody, rat monoclonal (2A11)

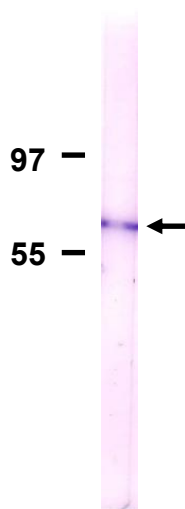


Fig.1 Detection of Nup62 in membrane fraction of HeLa cells by Western blotting,

Sample is the nuclear membrane fraction of HeLa cells.

The antibody was used at 1/500 dilution. As a second antibody, alkaline phosphatase conjugated anti-rat IgG antibody was used.

The protein migrates at 60 kDa position.

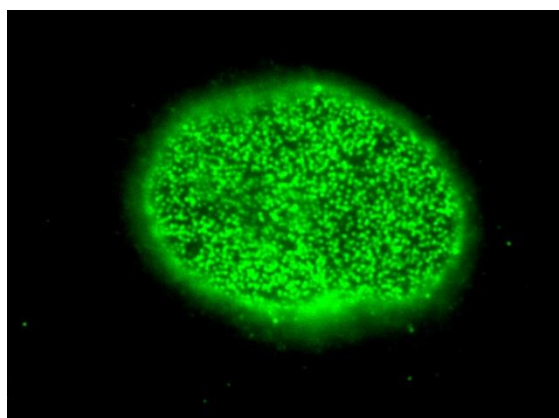


Fig.2 Immunofluorescent staining of HeLa cells with the antibody 2A, focused on nuclear surface.

HeLa cells were fixed with 3.7% formaldehyde and permeabilized with 0.5% Triton X-100. The anti-Nup62 antibody (2A11) was used at 1/400 and as a second antibody, Alexa 488 conjugated goat anti-rat IgG antibody was used at 1/500 dilution.

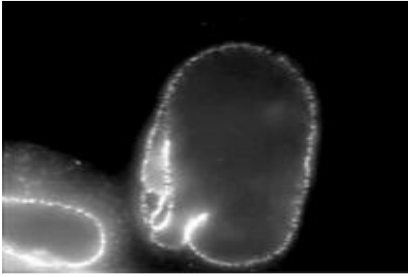


Fig.3. Immunofluorescent staining of HeLa cells with the antibody (2A11), focused on nuclear rim.
Methods are as described in Fig.2.

References: This antibody was described in Ref.1 and used in Ref.1 and 2.

1. Fukuhara T *et al* "Functional analysis of nuclear pore complex protein Nup62/p62 using monoclonal antibodies." *Hybridoma* **25**: 51-59 (2006) PMID [16704304](#)
2. Maeshima K *et al* "Cell-cycle-dependent dynamics of nuclear pores: pore-free islands and lamins." *J Cell Sci* **119**: 4442-4451 (2006) PMID [17074834](#)