

Anti-Nup153 antibody, rat monoclonal (R4C8)

Product code	70-315
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 GST-fused rat Nup153 (610-1191aa)
Isotype	Rat IgG2aκ
Reactivity	Human, mouse, rat and monkey Nup153 proteins. Other species have not been tested.
Special notes	Epitope: 610-1191 aa (Zn finger and FG repeats domain)
Application	1. Western blotting (160 kDa single band in Hela cell extract) 2. Immunocytochemistry 3. ELISA
Background	The nuclear pore complex (NPC) regulates cargo transport between the cytoplasm and the nucleus. Nup (Nucleoporin) 153 is a large (153kDa) O-linked glycoprotein which is a component of the basket structure located on the nucleoplasmic face of NPC. Nup153 plays a critical role in nuclear export of RNA and proteins. The antibody was purified from the serum-free cultured medium of the hybridoma under mild conditions by propriety chromatography processes.
Data Link	UniProtKB/Swiss-Prot P49790 (NU153_HUMAN) UniProtKB P49791 (NU153_RAT)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 70-315 Anti-Nup153 antibody, rat monoclonal (R4C8)

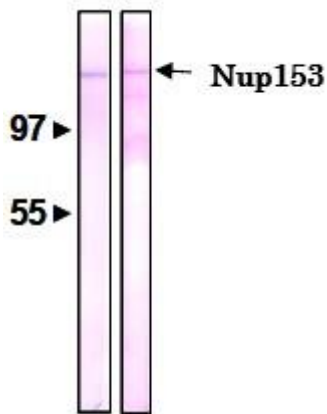


Fig.1 Detection of Nup153 by Western blotting with antibody R4C8.

Sample is the nuclear membrane fraction of HeLa cells (Left) and NIH3T3 cells (Right).

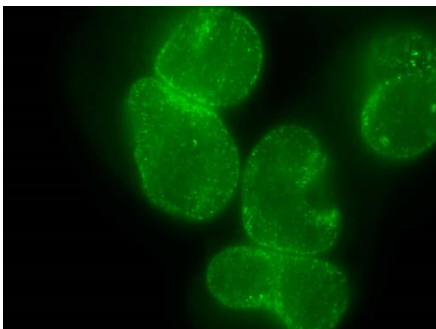


Fig.2 Immunofluorescent staining of HeLa cells with antibody R4C8.

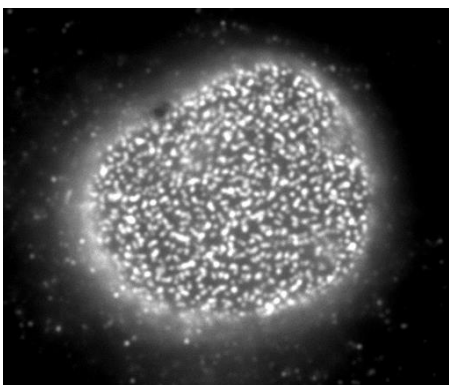


Fig.3 Immunofluorescent staining of rat neuron with antibody R4C8.

The dots are Nup153.

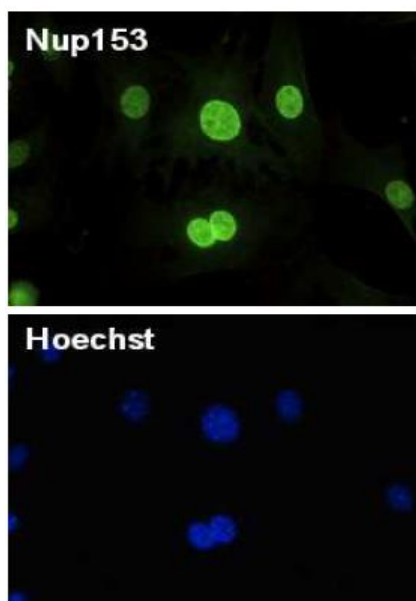


Fig 4. Immunofluorescent staining of MEF cells from E14.5 mouse embryo with antibody R4C8.

Cells fixed with 10% formalin at room temperature for 10 min and permeabilized with ice-cold methanol on ice for 10 min. Cells were blocked with 3% BSA/PBS at room temperature for 30 min and incubated with Nup153 (1:200) antibodies at 4°C overnight, and treated with Alexa-488-cojugated rat IgG (1:1000) at room temperature for 1hr. Chromosomal DNA was detected by staining with 3.3 μ M Hoechst 33342. Nuclear peripheries were stained with anti-Nup153 antibody R4C8.

References: This antibody has been used in the following publications.

1. Iino H et al. Live imaging system for visualizing nuclear pore complex (NPC) formation during interphase in mammalian cells. *Genes to Cells* Volume 15, Issue 6. **IF (hamster)**
2. Maeshima K et al. Nuclear pore formation but not nuclear growth is governed by cyclin-dependent kinases (Cdks) during interphase. *Nature Structural & Molecular Biology* volume 17, pages 1065–1071 (2010). **IF, WB (human)**