

## **Anti-Nup153 antibody, rat monoclonal (R4C8)**

70-315      200 µg

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.

### **Applications**

1. Western blotting (160 kDa single band in Hela cell extract)
2. Immunocytochemistry
3. ELISA

Other applications are not tested.

Additional comments: When injected into the nucleus, R4C8 accumulates into the nuclear pores of Hela cells. R4C8 works in immuno-cytochemistry very well (Fig. 2 & 3).

### **Specification**

Immunogen: Recombinant GST-fused rat Nup153 (610-1191aa)

Epitope: 610-1191 aa (Zn finger and FG repeats domain)

Isotype: Rat IgG2a κ

Form: Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized

Specificity: Specific to human, mouse, rat and monkey Nup153 proteins. Other species are not tested.

Storage: -20°C (long period, -70°C)

### **References:**

1. Ullman, K.S. *et al.* (1999) "The nucleoporin Nup153 plays a critical role in multiple types of nuclear export." *Molecular Biology of the Cell* 10: 649-664.
2. Lim, R.Y. *et al.* (2007). "Nanomechanical basis of selective gating by the nuclear pore complex." *Science* 318: 640-643.

**(to be continued to next page)**

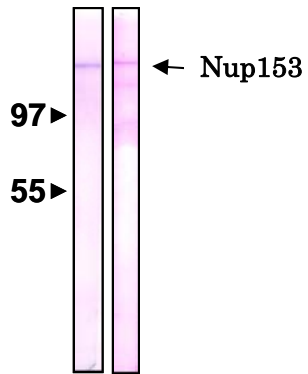


Fig.1  
Detection of Nup153 by Western blotting  
with antibody R4C8.  
Sample is the nuclear membrane fraction  
of HeLa cells (Left) and NIH3T3 cells  
(Right)..

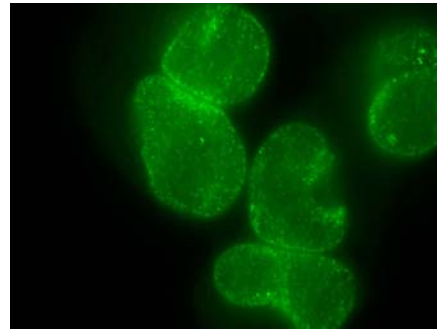


Fig.2  
Immunofluorescent staining of HeLa cells  
with antibody R4C8.

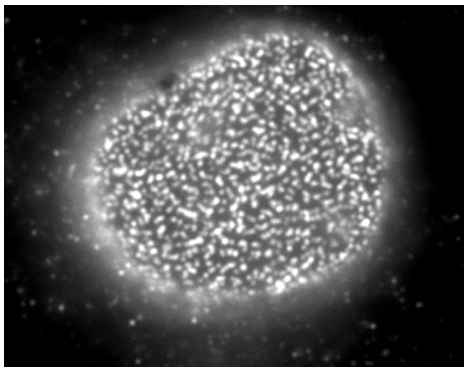


Fig.3  
Immunofluorescent staining of rat neuron  
with antibody R4C8.  
The dots are Nup153.