# **Technical Data Sheet**

# **Purified Mouse Anti-Nucleoporin p62**

#### **Product Information**

Material Number: 610498 Size:  $150 \mu g$  Concentration:  $250 \mu g/ml$ 

Clone: 53/Nucleoporin p62

Immunogen: Human Nucleoporin aa. 24-178

 Isotype:
 Mouse IgG2b

 Reactivity:
 QC Testing: Human

Tested in Development: Chicken, Mouse, Rat

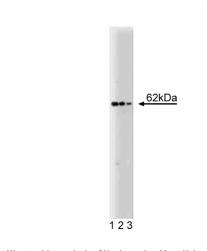
Target MW: 62 kDa

Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium

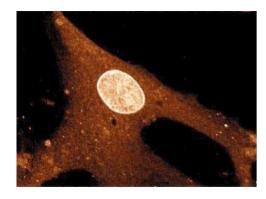
azide.

## Description

The nuclear pore complex (NPC) acts as a gate to mediate active transport of proteins and RNA into and out of the nucleus. Proteins actively transported into the nucleus through the NPC require specific nuclear localization sequences. Many of these nucleoporins contain N-acetylglucosamine (GlcNAc) residues that are O-linked to serine or threonine. p62 is the best characterized member of a group of nucleoporins that line the central region of the NPC. A tightly associated complex is formed by p62 and two other nucleoporins, p54 and p58. p54 binds to a carboxy-terminal coiled-coil domain of p62 and p58 binds to a dimer of p54. The amino-terminal domain of p62 contains a series of XFXFX repeats and is joined to the coiled-coil domain by a threonine-rich linker segment. The major role of p62 is maintenance of the structural integrity of NPCs.



Western blot analysis of Nucleoporin p62 on HeLa cell lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of anti-Nucleoporin p62.



Immunofluorescent staining on WI38 cells.

## **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

## **BD Biosciences**

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## **Application Notes**

## Application

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development
Immunofluorescence	Tested During Development
Immunohistochemistry	Not Recommended

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
611449	HeLa Cell Lysate	500 μg	(none)	
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)	
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal	

## **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References

Carmo-Fonseca M, Kern H, Hurt EC. Human nucleoporin p62 and the essential yeast nuclear pore protein NSP1 show sequence homology and a similar domain organization. Eur J Cell Biol. 1991; 55(1):17-30.(Biology)

Daigle N, Beaudouin J, Hartnell L, et al. Nuclear pore complexes form immobile networks and have a very low turnover in live mammalian cells. *J Cell Biol.* 2001; 154(1):71-84.(Clone-specific: Immunohistochemistry)

Iborra FJ, Jackson DA, Cook PR. The path of RNA through nuclear pores: apparent entry from the sides into specialized pores. *J Cell Sci.* 2000; 113(2):291-302. (Clone-specific: Electron microscopy)

Paroni G, Henderson C, Schneider C, Brancolini C. Caspase-2 can trigger cytochrome C release and apoptosis from the nucleus. *J Biol Chem.* 2002; 277(17):15147-15161.(Clone-specific: Immunofluorescence)

Shah M, Patel K, Fried VA, Sengal PB. Interactions of STAT3 with caveolin-1 and heat shock protein 90 in plasma membrane raft and cytosolic complexes. Preservation of cytokine signaling during fever. *J Biol Chem.* 2002; 277(47):45662-45669.(Clone-specific: Western blot)

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