

# nucleoporin p62 (H-122): sc-25523

## BACKGROUND

Protein transport across the nucleus is a selective, multi-step process involving several cytoplasmic factors. Proteins must be recognized as import substrates, dock at the nuclear pore complex, and translocate across the nuclear envelope in an ATP-dependent fashion. Two cytosolic factors centrally involved in the recognition and docking process are the karyopherin  $\alpha$  and karyopherin  $\beta$  proteins. The karyopherin holoenzyme is a heterodimer of  $\alpha$  and  $\beta$  subunits. Karyopherin  $\alpha$  functions in the recognition and targeting of substrates destined for nuclear import, while karyopherin  $\beta$  serves as an adaptor, tethering the karyopherin  $\alpha$  substrate complex to docking proteins (termed nucleoporins) on the nuclear envelope. p62 glycoprotein is one such nucleoporin, and is not only involved in the nuclear import of proteins, but also the export of nascent mRNA strands. An additional protein, NTF2 (nuclear transport factor 2), interacts with nucleoporin p62 as a homodimer and may be an obligate component of functional p62.

## CHROMOSOMAL LOCATION

Genetic locus: NUP62 (human) mapping to 19q13.33; Nup62 (mouse) mapping to 7 B4.

## SOURCE

nucleoporin p62 (H-122) is a rabbit polyclonal antibody raised against amino acids 401-522 of nucleoporin p62 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

nucleoporin p62 (H-122) is recommended for detection of nucleoporin p62 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

nucleoporin p62 (H-122) is also recommended for detection of nucleoporin p62 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for nucleoporin p62 siRNA (h): sc-36107, nucleoporin p62 siRNA (m): sc-36108, nucleoporin p62 shRNA Plasmid (h): sc-36107-SH, nucleoporin p62 shRNA Plasmid (m): sc-36108-SH, nucleoporin p62 shRNA (h) Lentiviral Particles: sc-36107-V and nucleoporin p62 shRNA (m) Lentiviral Particles: sc-36108-V.

Molecular Weight of nucleoporin p62: 62 kDa.

Positive Controls: nucleoporin p62 (h2): 293T Lysate: sc-175211, BJAB whole cell lysate: sc-2207 or HeLa whole cell lysate: sc-2200.

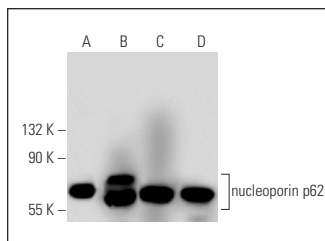
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

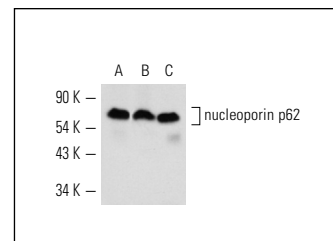
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



nucleoporin p62 (H-122): sc-25523. Western blot analysis of nucleoporin p62 expression in non-transfected 293T: sc-117752 (A), human nucleoporin p62 transfected 293T: sc-175211 (B), PC-3 (C) and HeLa (D) whole cell lysates.



nucleoporin p62 (H-122): sc-25523. Western blot analysis of nucleoporin p62 expression in BJAB (A), HeLa (B) and Jurkat (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Gong, W., et al. 2006. Subcellular targeting of p33<sup>ING1b</sup> by phosphorylation-dependent 14-3-3 binding regulates p21<sup>WAF1</sup> expression. *Mol. Cell Biol.* 26: 2947-2954.
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- Wu, G., et al. 2014. Inhibition of autophagy by autophagic inhibitors enhances apoptosis induced by bortezomib in non-small cell lung cancer cells. *Biotechnol. Lett.* 36: 1171-1178.



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Try **nucleoporin p62 (E-4): sc-48389** or **nucleoporin p62 (C-9): sc-48373**, our highly recommended monoclonal alternatives to nucleoporin p62 (H-122).