SANTA CRUZ BIOTECHNOLOGY, INC.

nucleoporin p62 (h2): 293T Lysate: sc-175211

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 α and karyopherin β proteins. The karyopherin holoenzyme is a heterodimer of α and β subunits. Karyopherin α functions in the recognition and targeting of substrates destined for nuclear import, while karyopherin β serves as an adaptor, tethering the karyopherin α 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.

REFERENCES

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3. Buss, F. and Stewart, M. 1995. Macromolecular interactions in the nucleoporin p62 complex of rat nuclear pores: binding of nucleoporin p54 to the rod domain of p62. J. Cell Biol. 128: 251-261.
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CHROMOSOMAL LOCATION

Genetic locus: NUP62 (human) mapping to 19q13.33.

RESEARCH USE

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

PRODUCT

nucleoporin p62 (h2): 293T Lysate represents a lysate of human nucleoporin p62 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

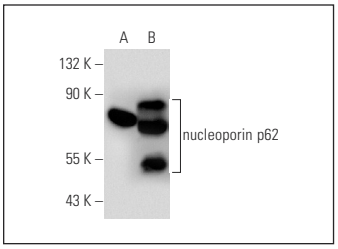
APPLICATIONS

nucleoporin p62 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive nucleoporin p62 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

nucleoporin p62 (2A11): sc-101543 is recommended as a positive control antibody for Western Blot analysis of enhanced human nucleoporin p62 expression in nucleoporin p62 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



nucleoporin p62 (2A11): sc-101543. Western blot analysis of nucleoporin p62 expression in non-transfected: sc-117752 (**A**) and human nucleoporin p62 transfected: sc-175211 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.