

karyopherin α 2 (H-50): sc-25522

BACKGROUND

Protein transport across the nucleus is a selective, multistep 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 1 and karyopherin β 1 subunits. Karyopherin α 1 functions in the recognition and targeting of substrates destined for nuclear import, while karyopherin β 1 serves as an adapter, tethering the karyopherin α 1/substrate complex to docking proteins on the nuclear envelope termed nucleoporins. Karyopherin α 2 has been shown to complex with Epstein-Barr virus nuclear antigen 1 (EBNA1). Certain RNA-binding proteins are imported to the nucleus by karyopherin β 2, and karyopherin β 3 appears to be involved in the import of some ribosomal proteins.

REFERENCES

- Moroianu, J., et al. 1995. Previously identified protein of uncertain function is karyopherin α and together with karyopherin β docks import substrate at nuclear pore complexes. *Proc. Natl. Acad. Sci. USA* 92: 2008-2011.
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- Fischer, N., et al. 1997. Epstein-Barr virus nuclear antigen 1 forms a complex with the nuclear transporter karyopherin α 2. *J. Biol. Chem.* 272: 3999-4005.

CHROMOSOMAL LOCATION

Genetic locus: KPNA2 (human) mapping to 17q24.2; Kpna2 (mouse) mapping to 11 E1.

SOURCE

karyopherin α 2 (H-50) is a rabbit polyclonal antibody raised against amino acids 480-529 mapping at the C-terminus of karyopherin α 2 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

karyopherin α 2 (H-50) is recommended for detection of karyopherin α 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

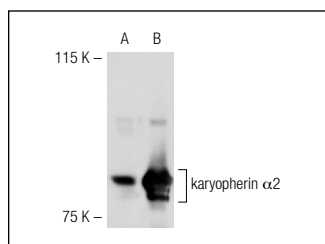
karyopherin α 2 (H-50) is also recommended for detection of karyopherin α 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for karyopherin α 2 siRNA (h): sc-35741, karyopherin α 2 siRNA (m): sc-35742, karyopherin α 2 shRNA Plasmid (h): sc-35741-SH, karyopherin α 2 shRNA Plasmid (m): sc-35742-SH, karyopherin α 2 shRNA (h) Lentiviral Particles: sc-35741-V and karyopherin α 2 shRNA (m) Lentiviral Particles: sc-35742-V.

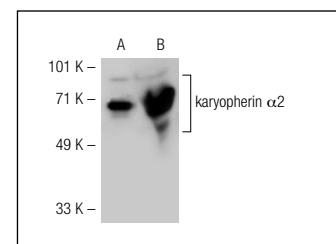
Molecular Weight of karyopherin α 2: 52 kDa.

Positive Controls: karyopherin α 2 (h): 293T Lysate: sc-116432, karyopherin α 2 (m): 293T Lysate: sc-125513 or BJAB whole cell lysate: sc-2207.

DATA



karyopherin α 2 (H-50): sc-25522. Western blot analysis of karyopherin α 2 expression in non-transfected: sc-117752 (A) and mouse karyopherin α 2 transfected: sc-125513 (B) 293T whole cell lysates.



karyopherin α 2 (H-50): sc-25522. Western blot analysis of karyopherin α 2 expression in non-transfected: sc-117752 (A) and human karyopherin α 2 transfected: sc-116432 (B) 293T whole cell lysates.

STORAGE

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


 MONOS
Satisfation
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Try **karyopherin α 2 (B-9): sc-55538** or **karyopherin α 2 (B-9): sc-55538**, our highly recommended monoclonal alternatives to karyopherin α 2 (H-50). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **karyopherin α 2 (B-9): sc-55538**.