

karyopherin 13 (D-8): sc-393661

BACKGROUND

Belonging to the importin β family, karyopherin 13 (Kap13), also known as Importin-13 (IPO13) or Ran-binding protein 13, is a 963 amino acid protein that contains 20 HEAT repeats and one importin N-terminal domain. Localizing to the nucleus as well as the cytoplasm, karyopherin 13 is expressed in fetal brain, heart, intestine and kidney. Karyopherin 13 acts as a nuclear transport receptor, participating in nuclear protein import and nuclear localization signals (NLS) in cargo substrates, in a Ras-related nuclear protein-GTPase dependent system. Karyopherin 13 mediates the nuclear import and/or export of UBC9, the RBM8A/MAGOH complex, Pax-6, eIF1AY and Ran. The gene encoding karyopherin 13 maps to human chromosome 1p34.1 and mouse chromosome 4 D2.1.

REFERENCES

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- Mingot, J.M., Kostka, S., Kraft, R., Hartmann, E. and Görlich, D. 2001. Importin 13: a novel mediator of nuclear import and export. EMBO J. 20: 3685-3694.
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CHROMOSOMAL LOCATION

Genetic locus: IPO13 (human) mapping to 1p34.1; lpo13 (mouse) mapping to 4 D2.1.

SOURCE

karyopherin 13 (D-8) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of karyopherin 13 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain 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 13 (D-8) is recommended for detection of karyopherin 13 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for karyopherin 13 siRNA (h): sc-62521, karyopherin 13 siRNA (m): sc-62522, karyopherin 13 shRNA Plasmid (h): sc-62521-SH, karyopherin 13 shRNA Plasmid (m): sc-62522-SH, karyopherin 13 shRNA (h) Lentiviral Particles: sc-62521-V and karyopherin 13 shRNA (m) Lentiviral Particles: sc-62522-V.

Molecular Weight of karyopherin 13: 109 kDa.

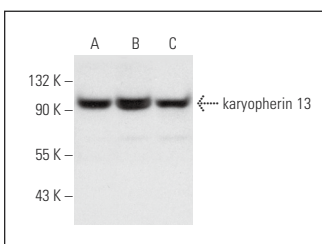
Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

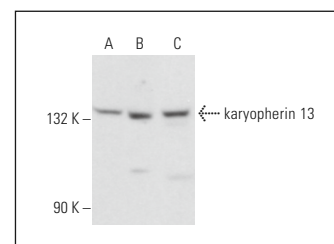
To ensure optimal results, the following support reagents are recommended:

- Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



karyopherin 13 (D-8): sc-393661. Western blot analysis of karyopherin 13 expression in Jurkat (A), K-562 (B) and HeLa (C) whole cell lysates.



karyopherin 13 (D-8): sc-393661. Western blot analysis of karyopherin 13 expression in Jurkat (A), A-673 (B) and L6 (C) 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.

PROTOCOLS

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