

karyopherin α 6 (C-12): sc-68197

BACKGROUND

Protein transport across the nucleus is a selective, multi-step process involving several cytoplasmic factors that mediate protein passage through the nuclear pore complex (NPC). Cytoplasmic proteins that contain nuclear localization signals (NLSs) must be recognized as import substrates, dock at the nuclear pore complex and translocate across the nuclear envelope in an ATP-dependent fashion. Karyopherin α 1 and karyopherin α 6 are widely expressed nuclear import proteins that act as adaptors for karyopherin β 1, specifically binding to and guiding NLS-containing proteins to the NPC. Both karyopherin α 1 and karyopherin α 6 contain one IBB domain and ten ARM repeats through which they convey their protein binding and localization function. Together, karyopherin α 1 and karyopherin α 6 are responsible for ensuring the nuclear import of NLS-containing substrates.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KPNA6 (human) mapping to 1p35.1; Kpna6 (mouse) mapping to 4 D2.2.

SOURCE

karyopherin α 6 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of karyopherin α 6 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.

Blocking peptide available for competition studies, sc-68197 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

karyopherin α 6 (C-12) is recommended for detection of karyopherin α 6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 6 (C-12) is also recommended for detection of karyopherin α 6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for karyopherin α 6 siRNA (h): sc-62525, karyopherin α 6 siRNA (m): sc-62526, karyopherin α 6 shRNA Plasmid (h): sc-62525-SH, karyopherin α 6 shRNA Plasmid (m): sc-62526-SH, karyopherin α 6 shRNA (h) Lentiviral Particles: sc-62525-V and karyopherin α 6 shRNA (m) Lentiviral Particles: sc-62526-V.

Molecular Weight of karyopherin α 6: 60 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.

PROTOCOLS

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



Try **karyopherin α 6 (E-11): sc-390055**, our highly recommended monoclonal alternative to karyopherin α 6 (C-12).