abcam

Product datasheet

Recombinant Human KPNA2 protein ab123205

画像数1

製品の詳細

製品名 Recombinant Human KPNA2 protein

精製度 > 90 % SDS-PAGE.

ab123205 is purified by using conventional chromatography.

発現系 Escherichia coli

アクセッション番号 <u>P52292</u>

タンパク質長 Full length protein

Animal free No

由来 Recombinant

生物種 Human

配列 MGSSHHHHHH SSGLVPRGSH MGSHMSTNEN

ANTPAARLHR FKNKGKDSTE MRRRRIEVNV ELRKAKKDDQ MLKRRNVSSF PDDATSPLQE NRNNQGTVNW SVDDIVKGIN SSNVENQLQA TQAARKLLSR EKQPPIDNII RAGLIPKFVS FLGRTDCSPI QFESAWALTN IASGTSEQTK VVVDGGAIPA FISLLASPHA HISEQAVWAL

DMSSLACGYL RNLTWTLSNL CRNKNPAPPI DAVEQILPTL VRLLHHDDPE VLADTCWAIS

GNIAGDGSVF RDLVIKYGAV DPLLALLAVP

YLTDGPNERI GMVVKTGVVP QLVKLLGASE LPIVTPALRA IGNIVTGTDE QTQVVIDAGA

LAVFPSLLTN PKTNIQKEAT WTMSNITAGR QDQIQQVVNH GLVPFLVSVL SKADFKTQKE

AVWAVTNYTS GGTVEQIVYL VHCGIIEPLM NLLTAKDTKI ILVILDAISN IFQAAENLGE TEKLSIMIEE CGGLDKIEAL QNHENESVYK

ASLSLIEKYF SVEEEEDQNV VPETTSEGYT

FQVQDGAPGT FNF

予測される分子量 61 kDa including tags

領域 1 to 529

タヴ His tag N-Terminus

特性

Our Abpromise guarantee covers the use of ab123205 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション SDS-PAGE

製品の状態 Liquid

前処理および保存

保存方法および安定性

Shipped at 4° C. Store at $+4^{\circ}$ C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.02% DTT, 0.32% Tris HCl, 20% Glycerol (glycerin, glycerine)

関連情報

機能

Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and directly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus.

組織特異性

Expressed ubiquitously.

配列類似性

Belongs to the importin alpha family.

Contains 10 ARM repeats. Contains 1 IBB domain.

ドメイン

Consists of an N-terminal hydrophilic region, a hydrophobic central region composed of 10 repeats, and a short hydrophilic C-terminus. The N-terminal hydrophilic region contains the importin beta binding domain (IBB domain), which is sufficient for binding importin beta and

essential for nuclear protein import.

The IBB domain is thought to act as an intrasteric autoregulatory sequence by interacting with the internal autoinhibitory NLS. Binding of KPNB1 probably overlaps the internal NLS and contributes to a high affinity for cytoplasmic NLS-containing cargo substrates. After dissociation of the importin/substrate complex in the nucleus the internal autohibitory NLS contributes to a low affinity for nuclear NLS-containing proteins.

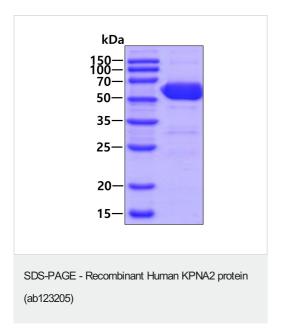
The major and minor NLS binding sites are mainly involved in recognition of simple or bipartite NLS motifs. Structurally located within in a helical surface groove they contain several conserved Trp and Asn residues of the corresponding third helices (H3) of ARM repeats which mainly

contribute to binding.

細胞内局在

Cytoplasm. Nucleus.

画像



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

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