abcam

Product datasheet

Recombinant Human KPNA2 protein ab123205

1 图像

描述

产品名称 重组人KPNA2蛋白

纯**度** > 90 % SDS-PAGE.

ab123205 is purified by using conventional chromatography.

表达系统 Escherichia coli

Accession P52292

蛋白长度 Full length protein

无动物成分 No

性质 Recombinant

种属 Human

序列 MGSSHHHHHH SSGLVPRGSH MGSHMSTNEN

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

GNIAGDGSVF RDLVIKYGAV DPLLALLAVP DMSSLACGYL RNLTWTLSNL CRNKNPAPPI

VVVDGGAIPA FISLLASPHA HISEQAVWAL

DAVEQILPTL VRLLHHDDPE VLADTCWAIS
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

预**测分子量** 61 kDa including tags

氨基酸 1 to 529

标签 His tag N-Terminus

技术指标

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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.

应用 SDS-PAGE

形式 Liquid

制备和贮存

稳定性和存储 Shipped at 4°C. Store at +4°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)

常规信息

功能 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.

组织特异性 Expressed ubiquitously.

序列相似性 Belongs to the importin alpha family.

Contains 10 ARM repeats. Contains 1 IBB domain.

结**构域** 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.

细胞定位 Cytoplasm. Nucleus.

图片



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

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