




Anti-KPNA4 antibody ab6039

★★★★★ **3 Abreviews** **20 References** **1 图像**

概述

产品名称	Anti-KPNA4抗体
描述	山羊多克隆抗体to KPNA4
宿主	Goat
经测试应用	适用于: WB
种属反应性	与反应: Mouse, Rat, Human 预测可用于: Cow, Dog 
免疫原	Synthetic peptide corresponding to Human KPNA4 aa 500-600 (C terminal). Database link: NP_002259  Run BLAST with  Run BLAST with
阳性对照	WB: Human ovary lysate. Mouse ovary and testis lysate. Rat testis lysate.
常规说明	GenBank Accession Number – NP_002259.

The nuclear import of karyophilic proteins is directed by short amino acid sequences termed nuclear localization signals (NLSs). Karyopherins, or importins, are cytoplasmic proteins that recognize NLSs and dock NLS-containing proteins to the nuclear pore complex. The protein encoded by this gene shares the sequence similarity with *Xenopus* importin-alpha and *Saccharomyces cerevisiae* Srp1. This protein is found to interact with the NLSs of DNA helicase Q1 and SV40 T antigen.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

存储溶液	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 99% Tris buffered saline, 0.5% BSA
纯度	Immunogen affinity purified
纯化说明	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Primary antibody说明	The nuclear import of karyophilic proteins is directed by short amino acid sequences termed nuclear localization signals (NLSs). Karyopherins, or importins, are cytoplasmic proteins that recognize NLSs and dock NLS-containing proteins to the nuclear pore complex. The protein encoded by this gene shares the sequence similarity with Xenopus importin-alpha and Saccharomyces cerevisiae Srp1. This protein is found to interact with the NLSs of DNA helicase Q1 and SV40 T antigen.
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab6039于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★☆ (1)	Use a concentration of 0.5 - 1 µg/ml. Detects a band of approximately 55-60 kDa (predicted molecular weight: 58 kDa). A 1 hour primary incubation is recommended for this product. A customer reported that milk can significantly suppress antigen-antibody interaction on nitrocellulose membrane in WB.

靶标

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. In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS. In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS.
组织特异性	Highly expressed in testis, ovary, small intestine, heart, skeletal muscle, lung and pancreas, but barely detectable in kidney, thymus, colon and peripheral blood leukocytes.
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.

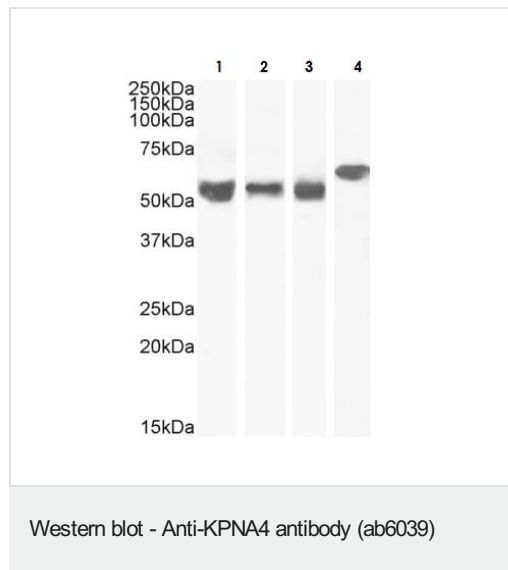
The IBB domain is thought to act as an intrasteric autoregulatory sequence by interacting with the internal autoinhibitory NLS. Binding of KPNA1 probably overlaps the internal NLS and contributes to a high affinity for cytoplasmic NLS-containing cargo substrates. After dissociation of the importin/substrate complex in the nucleus the internal autoinhibitory 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 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



Lanes 1-2 : Anti-KPNA4 antibody (ab6039) at 0.1 µg/ml

Lane 3 : Anti-KPNA4 antibody (ab6039) at 0.3 µg/ml

Lane 4 : Anti-KPNA4 antibody (ab6039) at 0.03 µg/ml

Lane 1 : Human ovary lysate

Lane 2 : Mouse testis lysate

Lane 3 : Mouse ovary lysate

Lane 4 : Rat testis lysate

Lysates/proteins at 35 µg per lane.

Predicted band size: 58 kDa

Lysates in RIPA buffer.

Detected by chemiluminescence.

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