


Product datasheet

Anti-KPNA2 antibody ab99288

1 References [画像数 2](#)

製品の概要

製品名	Anti-KPNA2 antibody
製品の詳細	Rabbit polyclonal to KPNA2
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB, ICC/IF
種交差性	交差種: Human 交差が予測される動物種: Orangutan 
免疫原	Synthetic peptide conjugated to KLH derived from within residues 450 to the C-terminus of Human KPNA2.Immunogen <a href="#">の所有権に関して</a> (Peptide available as <a href="#">ab109889</a> .)
ポジティブ・コントロール	This antibody gave a positive signal in the following Human lysates: HeLa Whole Cell; Jurkat Whole Cell; HepG2 Whole Cell; HEK293 Whole Cell; MOLT4 Whole Cell; HeLa Nuclear; HepG2 Nuclear.

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab99288** in the following tested applications.

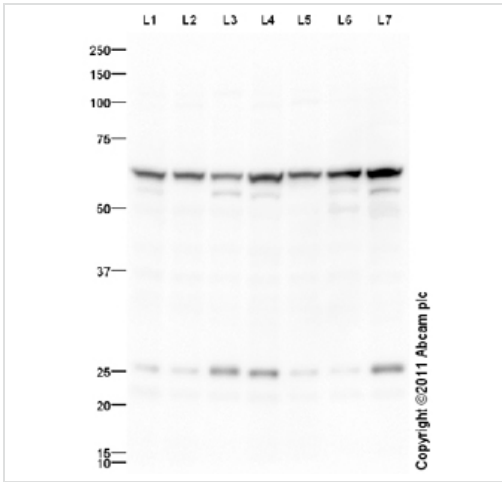
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 58 kDa (predicted molecular weight: 58 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

## ターゲット情報

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 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 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



Western blot - KPNA2 antibody (ab99288)

**All lanes :** Anti-KPNA2 antibody (ab99288) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 3 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 4 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

**Lane 5 :** MOLT4 (Human acute lymphoblastic leukemia cell line) Whole Cell Lysate

**Lane 6 :** HeLa (Human epithelial carcinoma cell line) Nuclear Lysate

**Lane 7 :** HepG2 (Human hepatocellular liver carcinoma cell line) Nuclear Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

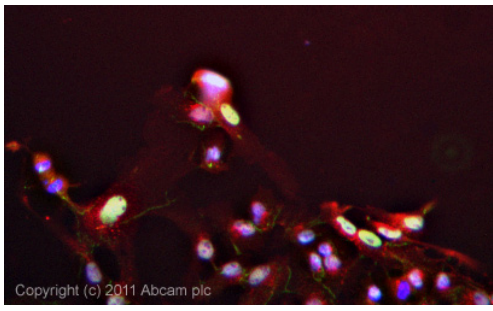
Performed under reducing conditions.

**Predicted band size:** 58 kDa

**Observed band size:** 58 kDa

**Additional bands at:** 25 kDa, 55 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 30 seconds



Immunocytochemistry/ Immunofluorescence -  
KPNA2 antibody (ab99288)

ICC/IF image of ab99288 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab99288 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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