# abcam

# Product datasheet

# Anti-KPNA3 antibody ab81453

# 画像数1

製品の概要

製品名 Anti-KPNA3 antibody

製品の詳細 Rabbit polyclonal to KPNA3

由来種 Rabbit

アプリケーション 適用あり: WB, ELISA

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat, Guinea pig, Pig, Zebrafish 🛕

免疫原 Synthetic peptide: MAENPSLENH RIKSFKNKGR DVETMRRHRN EVTVELRKNK

RDEHLLKKRN, corresponding to a region within N terminal amino acids 1 - 50 of Human

KPNA3 (NP\_002258).

ポジティブ・コントロール MCF7 cell lysate

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

#### アプリケーション

Our Abpromise guarantee covers the use of ab81453 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 $\mu$ g/ml. Predicted molecular weight: 59 kDa. Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.

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アプリケー ション 特記事項 ELISA Use at an assay dependent concentration. ELISA titre using peptide based assay: 1/12500.

#### 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. In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS. Recognizes NLSs of influenza A virus nucleoprotein probably through ARM repeats 7-9.

#### 組織特異性

#### 配列類似性

#### ドメイン

Ubiquitous. Highest levels in heart and skeletal muscle.

Belongs to the importin alpha family.

Contains 10 ARM repeats. Contains 1 IBB domain.

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.

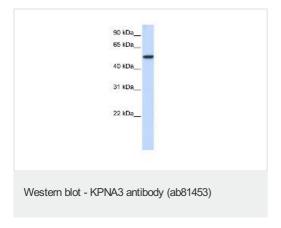
The IBB domain is thought to act as an intrasteric autoregulatory sequence by interacting with the internal autoinhibitory NLS. Binding of KPNB1 probably overlaps the internal NLS and contributes to a high affinity for cytoplasmic NLS-containing cargo substrates. After dissociation of the importin/substrate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



Anti-KPNA3 antibody (ab81453) at 1  $\mu$ g/ml (in 5% skim milk / PBS buffer) + MCF7 cell lysate at 10  $\mu$ g

### Secondary

HRP conjugated anti-Rabbit lgG at 1/50000 dilution

**Predicted band size:** 59 kDa **Observed band size:** 59 kDa

Gel concentration 12%

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