

# Recombinant Human Karyopherin subunit beta-1/KPNB1 Protein

Catalog No.: RP03270LQ **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	3837	Q14974

### Tags

N-His

### Synonyms

Karyopherin subunit beta-1; KPNB1; Importin subunit beta-1; Importin-90; Nuclear factor p97; Pore targeting complex 97 kDa subunit; PTAC97; NTF97

## Product Information

Source	Purification
E.coli	> 85% by SDS-PAGE.

### Endotoxin

&lt; 1.0 EU/μg of the protein by LAL method.

### Formulation

Supplied as a 0.22 μm filtered solution of 20 mM Tris-HCl, 1 mM DTT, 30% Glycerol, 100 mM NaCl, pH 8.0. Contact us for customized product form or formulation.

### Reconstitution

Please contact us for reconstitution instructions.

## Background

KPNB1 belongs to the importin beta family, and contains 1 importin N-terminal domain and 19 HEAT repeats. It functions in nuclear protein import, either in association with an adapter protein, like an importin-alpha subunit, which binds to nuclear localization signals (NLS) in cargo substrates, or by acting as autonomous nuclear transport receptor. 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.

## Basic Information

### Description

Recombinant Human KPNB1 Protein is produced by E.coli expression system. The target protein is expressed with sequence (Met1-Ala876) of human KPNB1 (Accession #Q14974) fused with His tag at the N-terminus.

### Bio-Activity

### Storage

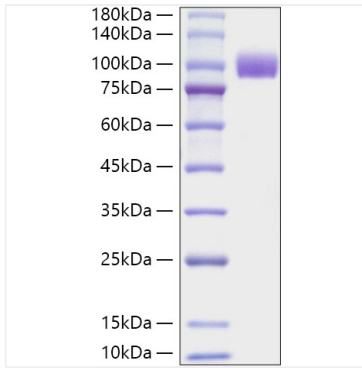
Store at ≤-70°C, stable for 12 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Validation Data

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Recombinant Human Karyopherin subunit beta-1/KPNB1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at approximately 85-105 kDa.