

Recombinant Human KPNB1 Protein (His Tag)

Catalog No. PKSH032583

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	Importin subunit beta-1;Importin-90;Karyopherin subunit beta-1;Nuclear factor p97;Pore targeting complex 97 kDa subunit;PTAC97;KPNB1;NTF97
Species	Human
Expression Host	E.coli
Sequence	Met 1-Ala876
Accession	Q14974
Calculated Molecular Weight	98.6 kDa
Observed molecular weight	90 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 1mM DTT, 30% Glycerol, 100mM NaCl, pH 8.0.
Reconstitution	Not Applicable

Background

Importin subunit beta-1(KPNB1) is a member of the importin beta family. KPNB1 contains 1 importin N-terminal domain and 19 HEAT repeats. It is involved in nucleocytoplasmic transport, a signal- and energy-dependent process, takes place through nuclear pore complexes embedded in the nuclear envelope. Its 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. The import of proteins containing a classical nuclear localization signal (NLS) requires the NLS import receptor, a heterodimer of importin alpha and beta subunits. Each of these subunits is part of the karyopherin family of proteins. Importin alpha binds the NLS-containing cargo in the cytoplasm and importin beta docks the complex at the cytoplasmic side of the nuclear pore complex. It mediates autonomously the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5.

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