Datasheet for ABIN7563511

KPNB1 Protein (AA 1-876) (His tag)

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Overview

Quantity:	1 mg
Target:	KPNB1
Protein Characteristics:	AA 1-876
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KPNB1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Kpnb1 Protein expressed in mammalian cells.
Sequence:	MELITILEKT VSPDRLELEA AQKFLERAAV ENLPTFLVEL SRVLANPGNS QVARVAAGLQ IKNSLTSKDP DIKAQYQQRW LAIDANARRE VKNYVLQTLG TETYRPSSAS QCVAGIACAE IPVSQWPELI PQLVANVTNP NSTEHMKEST LEAIGYICQD IDPEQLQDKS NEILTAIIQG MRKEEPSNNV KLAATNALLN SLEFTKANFD KESERHFIMQ VVCEATQCPD TRVRVAALQN LVKIMSLYYQ YMETYMGPAL FAITIEAMKS DIDEVALQGI EFWSNVCDEE MDLAIEASEA AEQGRPPEHT SKFYAKGALQ YLVPILTQTL TKQDENDDDD DWNPCKAAGV CLMLLSTCCE DDIVPHVLPF IKEHIKNPDW RYRDAAVMAF GSILEGPEPN QLKPLVIQAM PTLIELMKDP SVVVRDTTAW TVGRICELLP EAAINDVYLA PLLQCLIEGL SAEPRVASNV CWAFSSLAEA AYEAADVADD QEEPATYCLS SSFELIVQKL LETTDRPDGH QNNLRSSAYE SLMEIVKNSA KDCYPAVQKT TLVIMERLQQ VLQMESHIQS TSDRIQFNDL QSLLCATLQN VLRKVQHQDA LQISDVVMAS LLRMFQSTAG SGGVQEDALM AVSTLVEVLG GEFLKYMEAF KPFLGIGLKN YAEYQVCLAA VGLVGDLCRA LQSNILPFCD EVMQLLLENL GNENVHRSVK PQILSVFGDI

Product Details

	ALAIGGEFKK YLEVVLNTLQ QASQAQVDKS DFDMVDYLNE LRESCLEAYT GIVQGLKGDQ ENVHPDVMLV QPRVEFILSF IDHIAGDEDH TDGVVACAAG LIGDLCTAFG KDVLKLVEAR PMIHELLTEG RRSKTNKAKT LATWATKELR KLKNQA **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	KPNB1
Alternative Name:	Kpnb1 (KPNB1 Products)
Background:	Importin subunit beta-1 (Karyopherin subunit beta-1) (Nuclear factor p97) (Pore targeting complex 97 kDa subunit) (PTAC97) (SCG),FUNCTION: 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. Acting autonomously, serves itself as NLS receptor. Docking of the

Target Details

	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. Mediates autonomously the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5. In association with IPO7, mediates the nuclear import of H1 histone. In vitro, mediates nuclear import of H2A, H2B, H3 and H4 histones. Imports SNAI1 and PRKCI into the nucleus (By similarity). {ECO:0000250|UniProtKB:Q14974, ECO:0000269|PubMed:11493596}.
Molecular Weight:	97.2 kDa
UniProt:	P70168
Pathways:	Protein targeting to Nucleus

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months