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# Product datasheet for TP750203

## KPNA2 (Kpna2) (NM\_010655) Mus musculus Recombinant Protein

## **Product data:**

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of karyopherin (importin) alpha 2, Asn70-End,tag free,expressed in E.coli, 50ug
Species:	Mus musculus
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	NQGTVNWSVE DIVKGINSNN LESQLQATQA ARKLLSREKQ PPIDNIIRAG LIPKFVSFLG KTDCSPIQFE SAWALTNIAS GTSEQTKAVV DGGAIPAFIS LLASPHAHIS EQAVWALGNI AGDGSAFRDL VIKHGAIDPL LALLAVPDLS TLACGYLRNL TWTLSNLCRN KNPAPPLDAV EQILPTLVRL LHHNDPEVLA DSCWAISYLT DGPNERIEMV VKKGVVPQLV KLLGATELPI VTPALRAIGN IVTGTDEQTQ KVIDAGALAV FPSLLTNPKT NIQKEATWTM SNITAGRQDQ IQQVVNHGLV PFLVGVLSKA DFKTQKEAAW AITNYTSGGT VEQIVYLVHC GIIEPLMNLL SAKDTKIIQV ILDAISNIFQ AAEKLGETEK LSIMIEECGG LDKIEALQRH ENESVYKASL NLIEKYFSVE EEEDQNVVPE TTSEGFAFQV QDGAPGTFNF
Tag:	Tag Free
Predicted MW:	49.8kDa
Concentration:	>0.05 $\mu$ g/ $\mu$ L as determined by microplate BCA method
Purity:	> 90% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	50 mM Tris-HCl, pH 8.0, 500 mM NaCl, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP 034785</u>
Locus ID:	16647
UniProt ID:	<u>P52293, Q52L97</u>
Cytogenetics:	11 E1
Synonyms:	2410044B12Rik; IPOA1; PTAC58; Rch1



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Summary:

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.[UniProtKB/Swiss-Prot Function]

#### **Product images:**



Purified recombinant protein KPNA2 was analyzed by SDS-PAGE gel and Coomossie Blue Staining.

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