

Product datasheet for **RC234789**

KPNB1 (NM_001276453) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KPNB1 (NM_001276453) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KPNB1
Synonyms:	IMB1; Impnb; IPO1; IPOB; NTF97
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC234789 representing NM_001276453
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGGAGTCGACATTGGAAGCCATCGGTTATATTTGCCAAGATATAGACCCAGAGCAGCTACAAGATA
 AATCCAATGAGATTCTGACTGCCATAATCCAGGGGATGAGGAAAGAAGAGCCTAGTAATAATGTGAAGCT
 AGCTGCTACGAATGCACTCCTGAACTCATTGGAGTTCACCAAAGCAAACCTTTGATAAAGAGTCTGAAAGG
 CACTTTATTATGCAGGTGGTCTGTGAAGCCACACAGTGTCCAGATACGAGGGTACGAGTGGCTGCTTTAC
 AGAATCTGGTGAAGATAATGTCCTTATATTATCAGTACATGGAGACATATATGGGTCCTGCTTTTTTGC
 AATCACAATCGAAGCAATGAAAAGTGACATTGATGAGGTGGCTTTACAAGGGATAGAATTCTGGTCCAAT
 GTCTGTGATGAGGAAATGGATTTGGCCATTGAAGCTTCAGAGGCAGCAGAACAAGGACGGCCCCCTGAGC
 ACACCAGCAAGTTTTATCGAAGGGAGCACTACAGTATCTGGTCCAATCCTCACACAGACACTAACTAA
 ACAGGACGAAAAATGATGATGACGATGACTGGAACCCCTGCAAAGCAGCGGGGTGTCCTCATGCTTCTG
 GCCACCTGCTGTGAAGATGACATTGTCCCACATGTCCTCCCTTCATTAAGAACACATCAAGAACCCAG
 ATTTGGCGGTACCGGGATGCAGCAGTGTGGCTTTTGGTTGTATCTTGAAGGACCAGAGCCCAGTCACT
 CAAACCACTAGTTATACAGGCTATGCCACCCTAATAGAATTAATGAAAGACCCAGTGTAGTTGTTTCGA
 GATACAGCTGCATGGACTGTAGGCAGAAATTTGTGAGCTGCTTCTGAAGCTGCCATCAATGATGTCTACT
 TGGCTCCCCTGCTACAGTGTCTGATTGAGGGTCTCAGTGTGAACCCAGAGTGGCTTCAAATGTGTGCTG
 GGCTTTCTCCAGTCTGGCTGAAGCTGCTTATGAAGCTGCAGACGTTGCTGATGATCAGGAAGAACCAGCT
 ACTTACTGCTTATCTTCTTCATTTGAATCATAGTTTCAAGCTCCTAGAGACTACAGACAGACCTGATG
 GACACCAGAACAACCTGAGGAGTTCTGCATATGAATCTCTGATGGAATTTGTGAAAAACAGTGCCAAGGA
 TTGTTATCCTGCTGTCCAGAAAACGACTTTGGTCATCATGGAACGACTGCAACAGGTTCTTCAGATGGAG
 TCACATATCCAGAGCACATCCGATAGAATCCAGTTCAATGACCTTCAGTCTTTACTCTGTGCAACTCTTC
 AGAATGTTCTTCGAAAAGTGCAACATCAAGATGCTTTGCAGATCTCTGATGTGGTTATGGCTCCCTGTT
 AAGGATGTTCAAAGCACAGCTGGGTCTGGGGAGTACAAGAGGATGCCCTGATGGCAGTTAGCACACTG
 GTGGAAGTGTGGGTGGTGAATTCCTCAAGTACATGGAGGCCTTAAACCCTTCTGGGCATTGGATTAA
 AAAATTATGCTGAATACCAGTTTGTGTTGGCAGCTGTGGGCTTAGTGGGAGACTGTGCCGTGCCCTGCA
 ATCCAACATCATACCTTTCTGTGACGAGGTGATGCAGCTGCTTCTGAAAAATTTGGGGAATGAGAACGTC
 CACAGGCTCTGTGAAGCCGAGATTCTGTCAGTGTGTTGGTATTTGCCCTTGCTATTGGAGGAGAGTTTA
 AAAAACTTAGAGGTTGTATTGAATACTCTTCAGCAGGCTCCCAAGCCAGGTGGACAAGTCAGACTA
 TGACATGGTGGATTATCTGAATGAGCTAAGGGAAGCTGCTTGAAGCCTATACTGGAATCGTCCAGGGA
 TTAAAGGGGGATCAGGAGAACGTACACCCGGATGTGATGCTGGTACAACCCAGAGTAGAATTTATCTGT
 CTTTCAATTGACCATTGCTGGAGATGAGGATCACACAGATGGAGTAGTAGCTTGTGCTGCTGGACTAAT
 AGGGGACTTATGTACAGCATTGGGAAGGATGACTGAAATTAGTAGAAGCTAGGCCAATGATCCATGAA
 TTGTTAACTGAAGGGCGGAGATCGAAGACTAACAAGCAAAAACCTTGTACATGGGCAACAAAAGAAC
 TGAGGAACTGAAGAACCAAGCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >RC234789 representing NM_001276453
 Red=Cloning site Green=Tags(s)

MKESTLEAIGYICQDIDPEQLQDKSNEILTAIIQGMRKEEPSNNVLAATNALLNSLEFTKANFDKESER
 HFIMQVVCEATQCPDTRVRVAALQNLVKIMSLYYQYMETYMGPALFAITIEAMKSDIDEVALQGIEFWSN
 VCDEEMDLAIEASEAAEQGRPEHTSKFYAKGALQYLVPILTQTLTKQDENDDDDWNPKAAGVCLMLL
 ATCCEDDIVPHVLPFIIKEHIKNDWRYRDAAVMAFGCILEGPEPSQLKPLVIQAMPTLIELMKDPSVVVR
 DTAAWTVGRICELLPEAAINDVYLAPLLQCLIEGLSAEPRVASNVCWAFSSLAEEAAYEAADVADDQEEPA
 TYCLSSSFELIVQKLETTDRPDGHQNNLRSSAYESLMEIVKNSAKDCYPAVQKTTLVIMERLQQVLQME
 SHIQSTSDRIQFNDLQSLLCATLQNVLRKVQHQDALQISDVVMASLLRMFQSTAGSGGVQEDALMAVSTL
 VEVLGGEFLKYMEAFKPFLLGIGLKNYAEYQVCLAAGLVGDLCRALQSNIIIPFCDEVMQLLLENLGNEN
 HRSVKPQILSVFGDIALAIGGEFKYLEVVLNTLQQASQAQVDKSDYDMVDYLNELRESCLEAYTGIVQG
 LKGDQENVHPDVMLVQPRVEFILSFIDHIAGDEDHTDGVVACAAGLIGDLCTAFGKDVLLKLVPEARPMIHE
 LLTEGRRSKTNKAKTLATWATKELRKLKNQA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001276453

ORF Size: 2193 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001276453.2](#)

RefSeq Size: 3951 bp

RefSeq ORF: 2196 bp

Locus ID: 3837

UniProt ID: [Q14974](#)

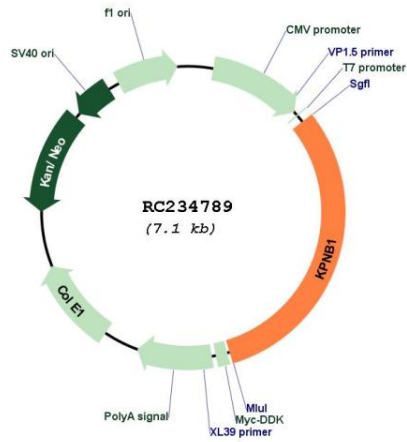
Cytogenetics: 17q21.32

Protein Families: Druggable Genome, Stem cell - Pluripotency

MW: 81.6 kDa

Gene Summary: Nucleocytoplasmic transport, a signal- and energy-dependent process, takes place through nuclear pore complexes embedded in the nuclear envelope. The import of proteins containing a nuclear localization signal (NLS) requires the NLS import receptor, a heterodimer of importin alpha and beta subunits also known as karyopherins. 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. In the presence of nucleoside triphosphates and the small GTP binding protein Ran, the complex moves into the nuclear pore complex and the importin subunits dissociate. Importin alpha enters the nucleoplasm with its passenger protein and importin beta remains at the pore. Interactions between importin beta and the FG repeats of nucleoporins are essential in translocation through the pore complex. The protein encoded by this gene is a member of the importin beta family. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2013]

Product images:



Circular map for RC234789