

### Product datasheet for RC207221L3

#### OriGene Technologies, Inc.

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## Karyopherin beta 3 (IPO5) (NM\_002271) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Karyopherin beta 3 (IPO5) (NM\_002271) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Karyopherin beta 3

Synonyms: IMB3; imp5; KPNB3; Pse1; RANBP5

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC207221).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_002271

ORF Size: 3345 bp



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**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: <u>NM 002271.4</u>, <u>NP 002262.3</u>

13q32.2

 RefSeq Size:
 6019 bp

 RefSeq ORF:
 3294 bp

 Locus ID:
 3843

 UniProt ID:
 000410

Cytogenetics:

**Protein Families:** Druggable Genome

**MW:** 125.4 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

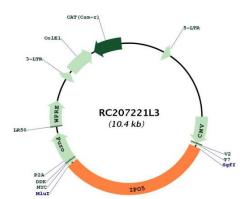
cytoplasmic side of the nuclear pore complex. In the presence of nucleoside triphosphates and the small GTP binding protein Ran, the complex moves into the nuclear pore complex and the importin subunits dissociate. Importin alpha enters the nucleoplasm with its

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. [provided by

RefSeq, Jul 2008]



# **Product images:**



Circular map for RC207221L3