

### Product datasheet for RC207221L4V

#### OriGene Technologies, Inc.

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## Karyopherin beta 3 (IPO5) (NM 002271) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

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

**Symbol:** Karyopherin beta 3

Synonyms: IMB3; imp5; KPNB3; Pse1; RANBP5

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_002271 **ORF Size:** 3345 bp

**ORF Nucleotide** 

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

OTI Disclaimer:

Sequence:

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.

**RefSeg:** NM 002271.4, NP 002262.3

 RefSeq Size:
 6019 bp

 RefSeq ORF:
 3294 bp

 Locus ID:
 3843

 UniProt ID:
 000410

 Cytogenetics:
 13q32.2

**Protein Families:** Druggable Genome

MW: 125.4 kDa





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#### **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]