

Product datasheet for SR302594

OriGene Technologies, Inc.

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KPNB1 Human siRNA Oligo Duplex (Locus ID 3837)

Product data:

Product Type: siRNA Oligo Duplexes

Purity: HPLC purified

Quality Control: Tested by ESI-MS

Sequences: Available with shipment

Stability: One year from date of shipment when stored at -20°C.

of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

Note: Single siRNA duplex (10nmol) can be ordered.

RefSeq: <u>NM 001276453</u>, <u>NM 002265</u>

UniProt ID: Q14974

Synonyms: IMB1; Impnb; IPO1; IPOB; NTF97

Components: KPNB1 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 3837)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml

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]





Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).