

## **Product datasheet for TR501207**

## **Kpna6 Mouse shRNA Plasmid (Locus ID 16650)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Kpna6 Mouse shRNA Plasmid (Locus ID 16650)

**Locus ID:** 16650

Synonyms: IPOA7; Kpna5; NPI-2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Kpna6 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

16650). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: BC004833, NM 008468, NM 008468.1, NM 008468.2, NM 008468.3, NM 008468.4, BC022673,

BC048075, BC058586

UniProt ID: 035345

**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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



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## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, 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 shRNA control (Western Blot data preferred).