

Product datasheet for **TR504934**

Katnb1 Mouse shRNA Plasmid (Locus ID 74187)

Product data:

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| Product Type: | shRNA Plasmids |
| Product Name: | Katnb1 Mouse shRNA Plasmid (Locus ID 74187) |
| Locus ID: | 74187 |
| Synonyms: | 2410003J24Rik; KAT |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | Katnb1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 74187). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | BC045200 , NM_028805 , NM_028805.1 , NM_028805.2 , BC024500 |
| UniProt ID: | Q8BG40 |
| Summary: | Participates in a complex which severs microtubules in an ATP-dependent manner. May act to target the enzymatic subunit of this complex to sites of action such as the centrosome. Microtubule severing may promote rapid reorganization of cellular microtubule arrays and the release of microtubules from the centrosome following nucleation. Microtubule release from the mitotic spindle poles may allow depolymerization of the microtubule end proximal to the spindle pole, leading to poleward microtubule flux and poleward motion of chromosome. The function in regulating microtubule dynamics at spindle poles seems to depend on the association of the katanin KATNA1:KATNB1 complex with ASPM which recruits it to microtubules. Reversely KATNA1:KATNB1 can enhance ASPM blocking activity on microtubule minus-end growth. Microtubule release within the cell body of neurons may be required for their transport into neuronal processes by microtubule-dependent motor proteins. This transport is required for axonal growth.[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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service . |



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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).