

Product datasheet for TL501859

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Ranbp1 Mouse shRNA Plasmid (Locus ID 19385)

Product data:

Product Type: shRNA Plasmids

Product Name: Ranbp1 Mouse shRNA Plasmid (Locus ID 19385)

Locus ID: 19385 Synonyms: Htf9a

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Ranbp1 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 19385).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC061140, NM 011239, NM 011239.1, NM 011239.2</u>

UniProt ID: P34022

Summary: Plays a role in RAN-dependent nucleocytoplasmic transport. Alleviates the TNPO1-dependent

inhibition of RAN GTPase activity and mediates the dissociation of RAN from proteins

involved in transport into the nucleus (PubMed:9428644). Induces a conformation change in the complex formed by XPO1 and RAN that triggers the release of the nuclear export signal of cargo proteins (By similarity). Promotes the disassembly of the complex formed by RAN and

importin beta. Promotes dissociation of RAN from a complex with KPNA2 and CSE1L (PubMed:9428644). Required for normal mitotic spindle assembly and normal progress through mitosis via its effect on RAN (By similarity). Does not increase the RAN GTPase activity by itself, but increases GTP hydrolysis mediated by RANGAP1 (PubMed:9428644). Inhibits RCC1-dependent exchange of RAN-bound GDP by GTP (By similarity).[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>.





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).