

Product datasheet for TR506803

Vps18 Mouse shRNA Plasmid (Locus ID 228545)

Product data:

Product Type: shRNA Plasmids

Product Name: Vps18 Mouse shRNA Plasmid (Locus ID 228545)

Locus ID: 228545

Synonyms: 9930024E13Rik

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Selection:

Puromycin

Format:

Retroviral plasmids

Components: Vps18 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

228545). 5µg purified plasmid DNA per construct

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

RefSeq: BC036129, BC039043, BC039176, NM 172269, NM 172269.1, NM 172269.2, NM 172269.3,

BC026870

UniProt ID: O8R307

Summary: Plays a role in vesicle-mediated protein trafficking to lysosomal compartments including the

endocytic membrane transport and autophagic pathways. Believed to act as a core

component of the putative HOPS and CORVET endosomal tethering complexes which are proposed to be involved in the Rab5-to-Rab7 endosome conversion probably implicating MON1A/B, and via binding SNAREs and SNARE complexes to mediate tethering and docking events during SNARE-mediated membrane fusion. The HOPS complex is proposed to be

recruited to Rab7 on the late endosomal membrane and to regulate late endocytic,

phagocytic and autophagic traffic towards lysosomes. The CORVET complex is proposed to function as a Rab5 effector to mediate early endosome fusion probably in specific endosome subpopulations (By similarity). Required for fusion of endosomes and autophagosomes with lysosomes (PubMed:14517315, PubMed:22854957). Involved in dendrite development of

Pukinje cells (PubMed:22699122).[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).