

## **Product datasheet for TR703733**

## Snx3 Rat shRNA Plasmid (Locus ID 684097)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Snx3 Rat shRNA Plasmid (Locus ID 684097)

**Locus ID:** 684097

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Snx3 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

684097). 5µg purified plasmid DNA per construct

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

**RefSeq:** <u>NM 001044283, NM 001044283.1, BC086341, BC107918, BC158608</u>

UniProt ID: Q5U211

**Summary:** Phosphoinositide-binding protein required for multivesicular body formation. Specifically

binds phosphatidylinositol 3-phosphate (PtdIns(P3)). Also can bind phosphatidylinositol 4-

phosphate (PtdIns(P4)), phosphatidylinositol 5-phosphate (PtdIns(P5)) and

phosphatidylinositol 3,5-biphosphate (PtdIns(3,5)P2). Plays a role in protein transport between cellular compartments. Together with RAB7A facilitates endosome membrane association of the retromer cargo-selective subcomplex (CSC). May act in part as component of the SNX3-retromer complex which mediates the retrograde endosome-to-TGN transport of

WLS distinct from the SNX-BAR retromer pathway. Promotes stability and cell surface

expression of epithelial sodium channel (ENAC) subunits SCNN1A and SCNN1G. Not involved in EGFR degradation. Involved in the regulation of phagocytosis in dendritic cells possibly by regulating EEA1 recruitment to the nascent phagosomes. Involved in iron homeostasis through regulation of endocytic recycling of the transferrin receptor Tfrc presuambly by delivering the transferrin:transferrin receptor complex to recycling endosomes; the function may involve the CSC retromer subcomplex. Involved in regulation of neurite outgrowth in

primary neurons.[UniProtKB/Swiss-Prot Function]



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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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).