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# Product datasheet for TL700922

## Vps26a Rat shRNA Plasmid (Locus ID 361846)

### Product data:

| | |
|---|---|
| **Product Type:** | shRNA Plasmids |
| **Product Name:** | Vps26a Rat shRNA Plasmid (Locus ID 361846) |
| **Locus ID:** | 361846 |
| **Synonyms:** | Vps26 |
| **Vector:** | pGFP-C-shLenti (TR30023) |
| **E. coli Selection:** | Chloramphenicol (34 ug/ml) |
| **Mammalian Cell Selection:** | Puromycin |
| **Format:** | Lentiviral plasmids |
| **Components:** | Vps26a - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 361846).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free. |
| **RefSeq:** | NM_001007740, NM_001007740.1, BC079150 |
| **UniProt ID:** | Q6AY86 |

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**Summary:**

Acts as component of the retromer cargo-selective complex (CSC). The CSC is believed to be the core functional component of retromer or respective retromer complex variants acting to prevent missorting of selected transmembrane cargo proteins into the lysosomal degradation pathway. The recruitment of the CSC to the endosomal membrane involves RAB7A and SNX3.The SNX-BAR retromer mediates retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN) and is involved in endosome-to-plasma membrane transport for cargo protein recycling. The SNX3-retromer mediates the retrograde endosome-to-TGN transport of WLS distinct from the SNX-BAR retromer pathway. The SNX27-retromer is believed to be involved in endosome-to-plasma membrane trafficking and recycling of a broad spectrum of cargo proteins. The CSC complex seems to act as recruitment hub for other proteins, such as the WASH complex and TBC1D5. Required for retrograde transport of lysosomal enzyme receptor IGF2R. Required to regulate transcytosis of the polymeric immunoglobulin receptor (pIgR-pIgA). Required for the endosomal localization of WASHC2 (indicative for the WASH complex). Required for the endosomal localization of TBC1D5. Mediates retromer cargo recognition of SORL1 and is involved in trafficking of SORL1 implicated in sorting and processing of APP. Involved in retromer-independent lysosomal sorting of F2R. Involved in recycling of ADRB2. Acts redundantly with VSP26B in SNX-27 mediated endocytic recycling of SLC2A1/GLUT1. Enhances the affinity of SNX27 for PDZ-binding motifs in cargo proteins (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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

**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).