

## Product datasheet for **TL309996V**

### **RAB3A Human shRNA Lentiviral Particle (Locus ID 5864)**

#### **Product data:**

|                      |   |
|----------------------|---|
| <b>Product Type:</b> | shRNA Lentiviral Particles  |
| <b>Product Name:</b> | RAB3A Human shRNA Lentiviral Particle (Locus ID 5864)   |
| <b>Locus ID:</b>     | 5864  |
| <b>Vector:</b>       | pGFP-C-shLenti (TR30023)  |
| <b>Format:</b>       | Lentiviral particles  |
| <b>Components:</b>   | RAB3A - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10 <sup>7</sup> TU/ml.   |
| <b>RefSeq:</b>       | <a href="#">NM_002866</a> , <a href="#">NM_002866.1</a> , <a href="#">NM_002866.2</a> , <a href="#">NM_002866.3</a> , <a href="#">BC011782</a> , <a href="#">BC011782.2</a> , <a href="#">BM717329</a> , <a href="#">NM_002866.5</a>  |
| <b>UniProt ID:</b>   | <a href="#">P20336</a>  |
| <b>Summary:</b>      | Small GTP-binding protein that plays a central role in regulated exocytosis and secretion. Controls the recruitment, tethering and docking of secretory vesicles to the plasma membrane (By similarity). Upon stimulation, switches to its active GTP-bound form, cycles to vesicles and recruits effectors such as RIMS1, RIMS2, Rabphilin-3A/RPH3A, RPH3AL or SYTL4 to help the docking of vesicles onto the plasma membrane (By similarity). Upon GTP hydrolysis by GTPase-activating protein, dissociates from the vesicle membrane allowing the exocytosis to proceed (By similarity). Stimulates insulin secretion through interaction with RIMS2 or RPH3AL effectors in pancreatic beta cells (By similarity). Regulates calcium-dependent lysosome exocytosis and plasma membrane repair (PMR) via the interaction with 2 effectors, SYTL4 and myosin-9/MYH9 (PubMed:27325790). Acts as a positive regulator of acrosome content secretion in sperm cells by interacting with RIMS1 (PubMed:22248876, PubMed:30599141). Plays also a role in the regulation of dopamine release by interacting with synaptotagmin I/SYT (By similarity).[UniProtKB/Swiss-Prot Function] |
| <b>shRNA Design:</b> | 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="#">custom shRNA service</a> .  |



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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](mailto: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).