

Product datasheet for **TF309987**

Rab5 (RAB5A) Human shRNA Plasmid Kit (Locus ID 5868)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Rab5 (RAB5A) Human shRNA Plasmid Kit (Locus ID 5868)
Locus ID:	5868
Synonyms:	RAB5
Vector:	pRFP-C-RS (TR30014)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	RAB5A - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 5868). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
RefSeq:	NM_001292048 , NM_004162 , NM_004162.1 , NM_004162.2 , NM_004162.3 , NM_004162.4 , NM_001292048.1 , BC018288 , BC018288.1 , BC001267
UniProt ID:	P20339
Summary:	The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. RAB5A is required for the fusion of plasma membranes and early endosomes (PubMed:10818110, PubMed:14617813, PubMed:16410077, PubMed:15378032). Contributes to the regulation of filopodia extension (PubMed:14978216). Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (PubMed:22660413). Regulates maturation of apoptotic cell-containing phagosomes, probably downstream of DYN2 and PIK3C3 (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 .



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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).