

Product datasheet for **TR306500**

ATP6V0A4 Human shRNA Plasmid Kit (Locus ID 50617)

Product data:

Product Type:	shRNA Plasmids
Product Name:	ATP6V0A4 Human shRNA Plasmid Kit (Locus ID 50617)
Locus ID:	50617
Synonyms:	A4; ATP6N1B; ATP6N2; DRTA3; RDRTA2; RTA1C; RTADR; STV1; VPH1; VPP2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ATP6V0A4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 50617). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_020632 , NM_130840 , NM_130841 , NM_020632.1 , NM_020632.2 , NM_130841.1 , NM_130841.2 , NM_130840.1 , NM_130840.2 , BC109304 , BC109305 , NM_130840.3 , NM_020632.3
UniProt ID:	Q9HBG4
Summary:	This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of intracellular compartments of eukaryotic cells. V-ATPase dependent acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c'', and d. This gene is one of four genes in man and mouse that encode different isoforms of the a subunit. Alternatively spliced transcript variants encoding the same protein have been described. Mutations in this gene are associated with renal tubular acidosis associated with preserved hearing. [provided by RefSeq, Jul 2008]
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).