

## Product datasheet for **TR306510**

### ATG4D Human shRNA Plasmid Kit (Locus ID 84971)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	ATG4D Human shRNA Plasmid Kit (Locus ID 84971)
Locus ID:	84971
Synonyms:	APG4-D; APG4D; AUTL4
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ATG4D - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 84971). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001281504</a> , <a href="#">NM_032885</a> , <a href="#">NR_104024</a> , <a href="#">NR_104025</a> , <a href="#">NM_032885.1</a> , <a href="#">NM_032885.2</a> , <a href="#">NM_032885.3</a> , <a href="#">NM_032885.4</a> , <a href="#">NM_032885.5</a> , <a href="#">NM_001281504.1</a> , <a href="#">BC068992</a> , <a href="#">BC068992.1</a> , <a href="#">BC007639</a> , <a href="#">BC016845</a> , <a href="#">BM671285</a> , <a href="#">NM_032885.6</a> , <a href="#">NM_001281504.2</a>
UniProt ID:	<a href="#">Q86TL0</a>
Summary:	Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene belongs to the autophagy-related protein 4 (Atg4) family of C54 endopeptidases. Members of this family encode proteins that play a role in the biogenesis of autophagosomes, which sequester the cytosol and organelles for degradation by lysosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]
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="#">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).