

## Product datasheet for **TG314986**

### Acid Phosphatase 2 (ACP2) Human shRNA Plasmid Kit (Locus ID 53)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Acid Phosphatase 2 (ACP2) Human shRNA Plasmid Kit (Locus ID 53)
Locus ID:	53
Synonyms:	acid phosphatase 2, lysosomal; Acp-2; LAP; OTTMUSP00000015308
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ACP2 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 53). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	<a href="#">NM_001131064</a> , <a href="#">NM_001302489</a> , <a href="#">NM_001302490</a> , <a href="#">NM_001302491</a> , <a href="#">NM_001302492</a> , <a href="#">NM_001610</a> , <a href="#">NM_001357016</a> , <a href="#">NM_001610.1</a> , <a href="#">NM_001610.2</a> , <a href="#">NM_001610.3</a> , <a href="#">NM_001131064.1</a> , <a href="#">NM_001302492.1</a> , <a href="#">NM_001302490.1</a> , <a href="#">NM_001302489.1</a> , <a href="#">BC093010</a> , <a href="#">BC003160</a> , <a href="#">NM_001610.4</a>
UniProt ID:	<a href="#">P11117</a>
Summary:	The protein encoded by this gene belongs to the histidine acid phosphatase family, which hydrolyze orthophosphoric monoesters to alcohol and phosphate. This protein is localized to the lysosomal membrane, and is chemically and genetically distinct from the red cell acid phosphatase. Mice lacking this gene showed multiple defects, including bone structure alterations, lysosomal storage defects, and an increased tendency towards seizures. An enzymatically-inactive allele of this gene in mice showed severe growth retardation, hair-follicle abnormalities, and an ataxia-like phenotype. Alternatively spliced transcript variants have been found for this gene. A C-terminally extended isoform is also predicted to be produced by the use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism. [provided by RefSeq, Oct 2017]
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).