

## **Product datasheet for TR314817**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Alkaline Phosphatase (ALPL) Human shRNA Plasmid Kit (Locus ID 249)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Alkaline Phosphatase (ALPL) Human shRNA Plasmid Kit (Locus ID 249)

Locus ID: 249

Synonyms: AP-TNAP; APTNAP; HOPS; HPPA; HPPC; HPPI; HPPO; TNALP; TNAP; TNSALP

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: ALPL - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

249). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 000478, NM 001127501, NM 001177520, NM 000478.1, NM 000478.2, NM 000478.3,

NM 000478.4, NM 000478.5, NM 001127501.1, NM 001127501.2, NM 001127501.3,

NM 001177520.1, NM 001177520.2, BC021289, BC021289.2, BC066116, BC090861, BC110909,

BC126165, BC136325, NM 001369805, NM 001369803, NM 001369804

UniProt ID: P05186

**Summary:** This gene encodes a member of the alkaline phosphatase family of proteins. There are at

least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue non-specific). The first three are located together on chromosome 2, while the tissue non-specific form is located on chromosome 1. The product of this gene is a membrane bound glycosylated enzyme that is not expressed in any particular tissue and is, therefore, referred to as the tissue-nonspecific form of the enzyme. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature enzyme. This enzyme may play a role in bone mineralization. Mutations in this gene have been linked to hypophosphatasia, a disorder that is characterized by hypercalcemia and skeletal defects. [provided by RefSeq, Oct

2015]





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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="mailto:custom shRNA service">custom shRNA service</a>.

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).