

Product datasheet for **TR314816**

Alkaline Phosphatase (ALPP) Human shRNA Plasmid Kit (Locus ID 250)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Alkaline Phosphatase (ALPP) Human shRNA Plasmid Kit (Locus ID 250)
Locus ID:	250
Synonyms:	ALP; ALPI; IAP; PALP; PLAP; PLAP-1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ALPP - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 250). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001632 , NM_001632.1 , NM_001632.2 , NM_001632.3 , NM_001632.4 , BC094743 , BC094743.1 , BC009647 , BC068501 , NM_001632.5
UniProt ID:	P05187
Summary:	The protein encoded by this gene is an alkaline phosphatase, a metalloenzyme that catalyzes the hydrolysis of phosphoric acid monoesters. It belongs to a multigene family composed of four alkaline phosphatase isoenzymes. The enzyme functions as a homodimer and has a catalytic site containing one magnesium and two zinc ions, which are required for its enzymatic function. One of the main sources of this enzyme is the liver, and thus, it's one of several indicators of liver injury in different clinical conditions. In pregnant women, this protein is primarily expressed in placental and endometrial tissue, however, strong ectopic expression has been detected in ovarian adenocarcinoma, serous cystadenocarcinoma, and other ovarian cancer cells. [provided by RefSeq, Aug 2020]
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).