

Product datasheet for **TG306647**

APE1 (APEX1) Human shRNA Plasmid Kit (Locus ID 328)

Product data:

Product Type:	shRNA Plasmids
Product Name:	APE1 (APEX1) Human shRNA Plasmid Kit (Locus ID 328)
Locus ID:	328
Synonyms:	APE; APE1; APEN; APEX; APX; HAP1; REF1
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	APEX1 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 328). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	NM_001244249 , NM_001641 , NM_080648 , NM_080649 , NM_080648.1 , NM_080648.2 , NM_001641.1 , NM_001641.2 , NM_001641.3 , NM_080649.1 , NM_080649.2 , NM_001244249.1 , BC004979 , BC002338 , BC002338.2 , BC095428 , BC008145 , BC019291 , NM_080648.3 , NM_001244249.2 , NM_080649.3 , NM_001641.4
UniProt ID:	P27695
Summary:	The APEX gene encodes the major AP endonuclease in human cells. It encodes the APEX endonuclease, a DNA repair enzyme with apurinic/apyrimidinic (AP) activity. Such AP activity sites occur frequently in DNA molecules by spontaneous hydrolysis, by DNA damaging agents or by DNA glycosylases that remove specific abnormal bases. The AP sites are the most frequent pre-mutagenic lesions that can prevent normal DNA replication. Splice variants have been found for this gene; all encode the same protein. Disruptions in the biological functions related to APEX are associated with many various malignancies and neurodegenerative diseases.[provided by RefSeq, Dec 2019]
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).