

## Product datasheet for **TG314734**

### APEX2 Human shRNA Plasmid Kit (Locus ID 27301)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	APEX2 Human shRNA Plasmid Kit (Locus ID 27301)
Locus ID:	27301
Synonyms:	APE2; APEXL2; XTH2; ZGRF2
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	APEX2 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 27301). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	<a href="#">NM_001271748</a> , <a href="#">NM_014481</a> , <a href="#">NM_014481.1</a> , <a href="#">NM_014481.2</a> , <a href="#">NM_014481.3</a> , <a href="#">NM_001271748.1</a> , <a href="#">BC002959</a> , <a href="#">BC002959.1</a> , <a href="#">BM795632</a> , <a href="#">NM_001271748.2</a> , <a href="#">NM_014481.4</a>
UniProt ID:	<a href="#">Q9UBZ4</a>
Summary:	Apurinic/aprimidinic (AP) sites occur frequently in DNA molecules by spontaneous hydrolysis, by DNA damaging agents or by DNA glycosylases that remove specific abnormal bases. AP sites are pre-mutagenic lesions that can prevent normal DNA replication so the cell contains systems to identify and repair such sites. Class II AP endonucleases cleave the phosphodiester backbone 5' to the AP site. This gene encodes a protein shown to have a weak class II AP endonuclease activity. Most of the encoded protein is located in the nucleus but some is also present in mitochondria. This protein may play an important role in both nuclear and mitochondrial base excision repair. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2012]
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).