

Product datasheet for RC201732L3

OriGene Technologies, Inc.

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APE1 (APEX1) (NM 001641) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: APE1 (APEX1) (NM_001641) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: APE1

Synonyms: APE; APE1; APEN; APEX; APX; HAP1; REF1

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC201732).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_001641

ORF Size: 954 bp



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OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001641.2</u>

RefSeq Size: 1574 bp

RefSeq ORF: 957 bp Locus ID: 328

UniProt ID: P27695

Cytogenetics: 14q11.2

Domains: Exo endo phos

Protein Families: Druggable Genome, Stem cell - Pluripotency, Transcription Factors

Protein Pathways: Base excision repair

MW: 35.4 kDa

Gene Summary: The APEX gene encodes the major AP endonuclease in human cells. It encodes the APEX

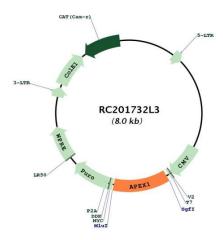
endonuclease, a DNA repair enzyme with apurinic/apyrimidinic (AP) activity. Such AP activity sites occur frequently in DNA molecules by spontaneous hydrolysis, by DNA damaging agents or by DNA glycosylases that remove specific abnormal bases. The AP sites are the most

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

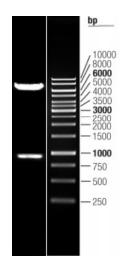
diseases.[provided by RefSeq, Dec 2019]



Product images:



Circular map for RC201732L3



Double digestion of RC201732L3 using Sgfl and Mlul