

Product datasheet for **SC319461**

APE1 (APEX1) (NM_080648) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: APE1 (APEX1) (NM_080648) Human Untagged Clone
Tag: Tag Free
Symbol: APE1
Synonyms: APE; APE1; APEN; APEX; APX; HAP1; REF1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC (PS100020)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_080648.1
 CCGGTGCAGATACGGGGTTGCTCTTTTGCTCATAAAGAGGGGCTTCGCTGGCAGTCTGAAC
 GGCAACGCGGTAAAAATATTGCTTCGGTGGGTGACGCGTACAGCTGCCAAGGGCGTTCC
 GTAACGGGAATGCCGAAGCGTGGGAAAAAGGGAGCGGTGGCGGAAGACGGGGATGAGCTC
 AGGACAGAGCCAGAGGCCAAGAAGAGTAAGACGGCCGCAAGAAAAATGACAAAGAGGCA
 GCAGGAGAGGGCCAGCCCTGTATGAGGACCCCCAGATCAGAAAACTCACCCAGTGGC
 AAACCTGCCACACTCAAGATCTGCTCTTGGAAATGTGGATGGGCTTCGAGCCTGGATTAAG
 AAGAAAGGATTAGATTGGGTAAGGAAGAAGCCCCAGATATACTGTGCCTTCAAGAGACC
 AAATGTTCCAGAGAACAACCTACCAGCTGAACTTCAGGAGCTGCCTGGACTCTCTCATCAA
 TACTGGTCAGCTCCTTCGGACAAGGAAGGTACAGTGGCGTGGCCTGCTTCCCGCCAG
 TGCCCACTCAAAGTTTCTTACGGCATAGGCGATGAGGAGCATGATCAGGAAGGCCGGGTG
 ATTGTGGCTGAATTTGACTCGTTTTGTGCTGGTAACAGCATATGTACCTAATGCAGGCCGA
 GGTCTGGTACGACTGGAGTACGGCAGCGCTGGGATGAAGCCTTTCGCAAGTTCCCTGAAG
 GGCTGGCTTCCCGAAAGCCCTTGTGCTGTGTGGAGACCTCAATGTGGCACATGAAGAA
 ATTGACCTTCGCAACCCCAAGGGGAACAAAAAGAAATGCTGGCTTCACGCCACAAGAGCGC
 CAAGGCTTCGGGGAATTACTGCAGGCTGTGCCACTGGCTGACAGCTTTAGGCACCTCTAC
 CCCAACACACCCTATGCCTACACCTTTTGGACTTATATGATGAATGCTCGATCCAAGAAT
 GTTGGTTGGCGCCTTGATTACTTTTTGTGTCCCACTCTCTGTTACCTGCATTGTGTGAC
 AGCAAGATCCGTTCCAAGGCCCTCGGCAGTGATCACTGTCTATACCCCTATACCCCTAGCA
 CTGTGACACCACCCTAAATCACTTTGAGCCTGGGAAATAGGCCCTCAACTACCATTCT
 CTTCTTTAAACACTCTTCAGAGAAATCTGCATTCTATTTCTCATGTATAAACTAGGAAT
 CCTCCAACCAGGCTCCTGTGATAGAGTTCTTTAAGCCCAAGATTTTTTATTTGAGGGTT
 TTTTGTTTTTTAAAAAAAATTGAACAAAGACTACTAATGACTTTGTTTGAATTATCCAC
 ATGAAAAATAAGAGCCATAGTTTCAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire



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ACCN:	NM_080648
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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_080648.1</u> , <u>NP_542379.1</u>
RefSeq Size:	1501 bp
RefSeq ORF:	957 bp
Locus ID:	328
UniProt ID:	<u>P27695</u>
Cytogenetics:	14q11.2
Domains:	Exo_endo_phos
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Base excision repair
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) uses a different donor splice site for exon 1 when compared to variant 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>

