

## Product datasheet for **TP313298L**

### **APE1 (APEX1) (NM\_080649) Human Recombinant Protein**

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human APEX nuclease (multifunctional DNA repair enzyme) 1 (APEX1), transcript variant 3, 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC213298 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MPKRGKKGAVAEDGDELRTPEAKKSKTAAKKNKDEAAGEGPALEDPPDQKTSPSGKPATLKICSWNV  
GLRAWIKKKGLDWWKKEAPDILCLQETKCSENKLPALQELPGLSHQYWSAPSDKEGYSYGVLLSRQCPL  
KVSYGIGDEEHDQEGRVIVAEFDSFVLVTAYVNPAGRGLVRLRYRQRWDEAFRFLKGLASRKPLVLCGD  
LNVAAHEEIDLRNPKGNKKNAGFTPQERQGFGEELLQAVPLADSRHLYPNTPYAYTFWYMMNARSKNVGW  
RLDYFLLSHLLPALCDSKIRSKALGSDHCPITLYLAL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	35.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_542380</a>
Locus ID:	328



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UniProt ID: [P27695](#), [Q5TZP7](#)

RefSeq Size: 1507

Cytogenetics: 14q11.2

RefSeq ORF: 954

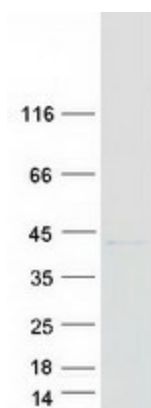
Synonyms: APE; APE1; APEN; APEX; APX; HAP1; REF1

**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]

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

**Protein Pathways:** Base excision repair

### Product images:



Coomassie blue staining of purified APEX1 protein (Cat# [TP313298]). The protein was produced from HEK293T cells transfected with APEX1 cDNA clone (Cat# [RC213298]) using MegaTran 2.0 (Cat# [TT210002]).