

## Product datasheet for **CF800336**

### **APE1 (APEX1) Mouse Monoclonal Antibody [Clone ID: OTI4D9]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI4D9
<b>Applications:</b>	IHC, WB
<b>Recommended Dilution:</b>	WB 1:2000, IHC 1:150
<b>Reactivity:</b>	Human, Dog, Rat, Monkey, Mouse
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG2b
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Human recombinant protein fragment corresponding to amino acids 1-242 of human APEX1 (NP_001632) produced in E.coli.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	35.4 kDa
<b>Gene Name:</b>	apurinic/aprimidinic endodeoxyribonuclease 1
<b>Database Link:</b>	<a href="#">NP_001632</a> <a href="#">Entrez Gene 11792 Mouse</a> <a href="#">Entrez Gene 79116 Rat</a> <a href="#">Entrez Gene 482558 Dog</a> <a href="#">Entrez Gene 702757 Monkey</a> <a href="#">Entrez Gene 328 Human</a> <a href="#">P27695</a>



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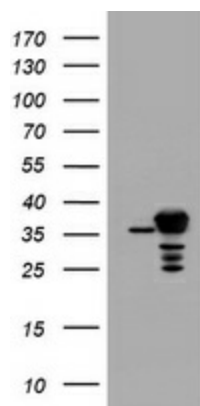
**Background:** Apurinic/apryrimidinic (AP) sites occur frequently in DNA molecules by spontaneous hydrolysis, by DNA damaging agents or by DNA glycosylases that remove specific abnormal bases. AP sites are pre-mutagenic lesions that can prevent normal DNA replication so the cell contains systems to identify and repair such sites. Class II AP endonucleases cleave the phosphodiester backbone 5' to the AP site. This gene encodes the major AP endonuclease in human cells. Splice variants have been found for this gene; all encode the same protein. [provided by RefSeq, Jul 2008]

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

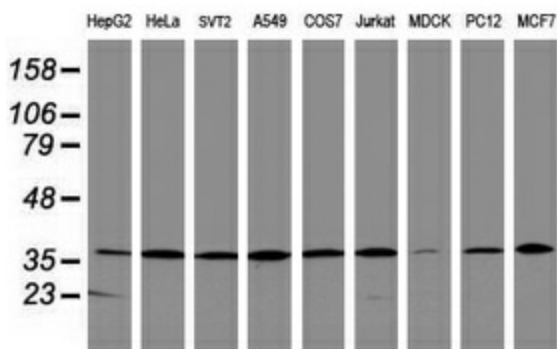
**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**Protein Pathways:** Base excision repair

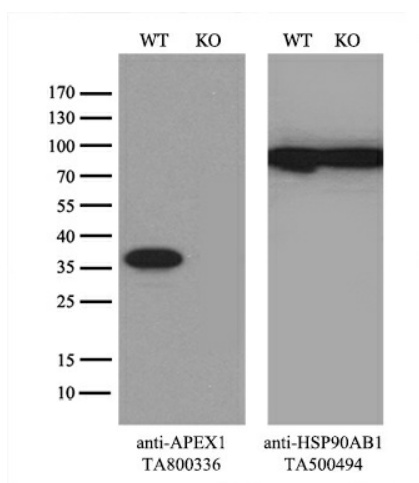
**Product images:**



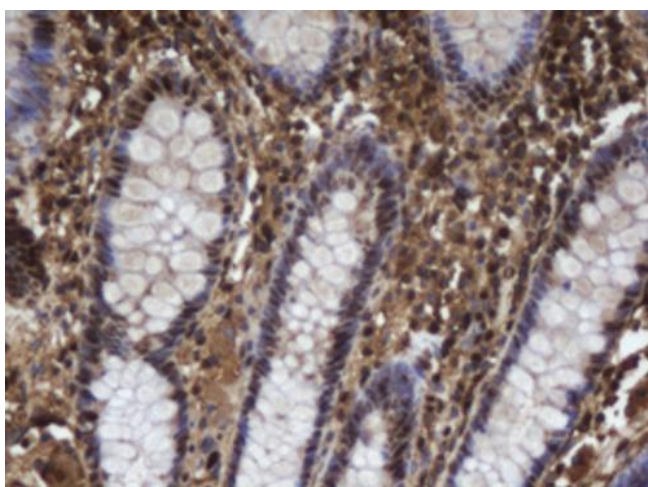
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY APEX1 [RC201732], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-APEX1. Positive lysates [LY400618] (100ug) and [LC400618] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-APEX1 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and APEX1-Knockout 293T cells (KO, Cat# [LC811481]) were separated by SDS-PAGE and immunoblotted with anti-APEX1 monoclonal antibody [TA800336], (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control.



Immunohistochemical staining of paraffin-embedded Human colon tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.