

Product Name: KD-Validated APE1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01320**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 35.6kDa

Antigen Information

Gene Name	APEX1 APEX1; Apurinic/Apyrimidinic Endodeoxyribonuclease 1; REF1; HAP1; APEN; APE; APX; REF-1; APE-1; APEX; APEX Nuclease (Multifunctional DNA Repair Enzyme); DNA-(Apurinic Or Apyrimidinic Site) Endonuclease; Apurinic-Apyrimidinic Endonuclease 1; Redox Factor-1;
Alternative Names	APE1; APEX Nuclease (Multifunctional DNA Repair Enzyme); Deoxyribonuclease (Apurinic Or Apyrimidinic); Apurinic/Apyrimidinic (Antibodyasic) Endonuclease; DNA-(Apurinic Or Apyrimidinic Site) Lyase; AP Endonuclease Class I; AP Endonuclease 1; Protein REF-1; APEX Nuclease; EC 4.2.99.18; EC 3.1.11.2; AP Lyase
Gene ID	328.0
SwissProt ID	P27695
Immunogen	A synthesized peptide derived from human APE1

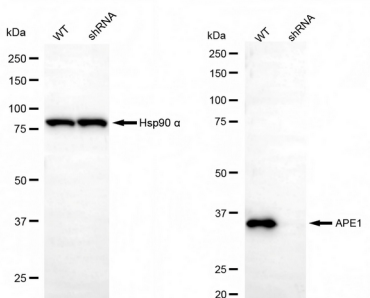
Background

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]

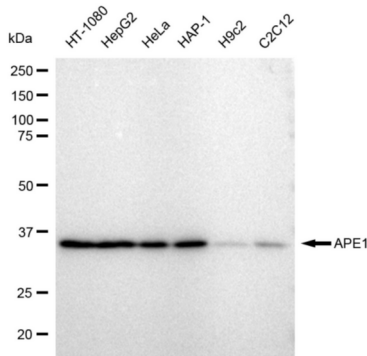
Research Area

Epigenetics and Nuclear Signaling, Cardiovascular

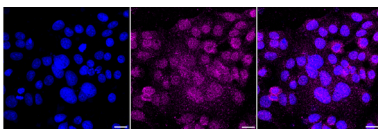
Image Data



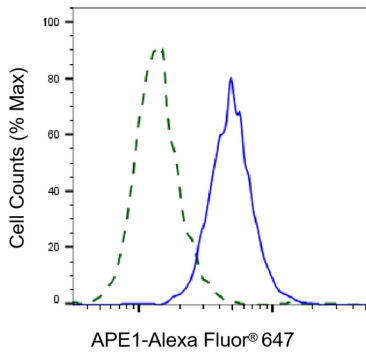
Western blotting analysis using APE1 antibody (KVA01320). APE1 expression in wild type (WT) and APE1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with APE1 antibody (KVA01320, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



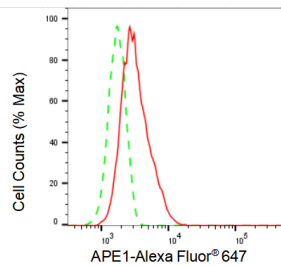
Western blotting analysis using APE1 antibody (KVA01320). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with APE1 antibody (KVA01320, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with APE1 antibody (KVA01320, 1:1,000). Nuclei were stained blue with DAPI; APE1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of APE1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with APE1 antibody (KVA01320, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of APE1 expression in HT-1080 cells using APE1 antibody (KVA01320, 1:2,000). Green, isotype control; red, APE1.