

Product Name: Ref-1 Rabbit Polyclonal Antibody**Catalog #: APRab16997**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	34kDa

Antigen Information

Gene Name	APEX1 APEX1; APE; APE1; APEX; APX; HAP1; REF1; DNA-(apurinic or apyrimidinic site) lyase; APEX
Alternative Names	nuclease; APEN; Apurinic-apyrimidinic endonuclease 1; AP endonuclease 1; APE-1; REF-1; Redox factor-1
Gene ID	328.0
SwissProt ID	P27695
Immunogen	The antiserum was produced against synthesized peptide derived from human APEX1. AA range:191-240

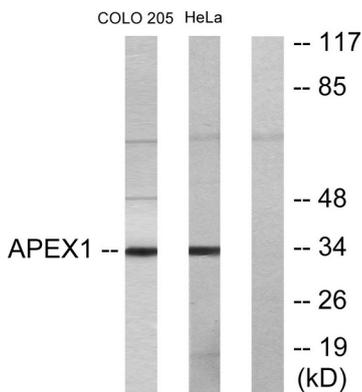
Background

Apurinic/aprimidinic (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],catalytic activity:The C-O-P bond 3' to the apurinic or apyrimidinic site in DNA is broken by a beta-elimination reaction, leaving a 3'-terminal unsaturated sugar and a product with a terminal 5'-phosphate.,function:Repairs oxidative DNA damages in vitro. May have a role in protection against cell lethality and suppression of mutations. Removes the blocking groups from the 3'-termini of the DNA strand breaks generated by ionizing radiations and bleomycin.,similarity:Belongs to the DNA repair enzymes AP/exoA family.,subunit:Monomer. Component of the SET complex, which also contains SET, ANP32A, HMGB2 and NME1.,

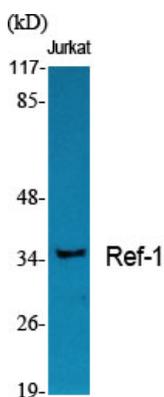
Research Area

Base excision repair;

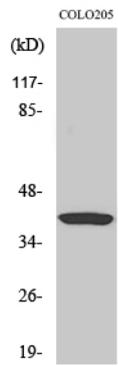
Image Data



Western blot analysis of lysates from COLO205 and HeLa cells, using APEX1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Ref-1 Polyclonal Antibody diluted at 1:2000



Western Blot analysis of HeLa cells using Ref-1 Polyclonal Antibody diluted at 1 : 2000