

Rabbit anti-Human APE1/APEX1 Polyclonal Antibody | anti-APEX1 antibody

Anti-APE1/APEX1 Antibody, Rabbit Polyclonal

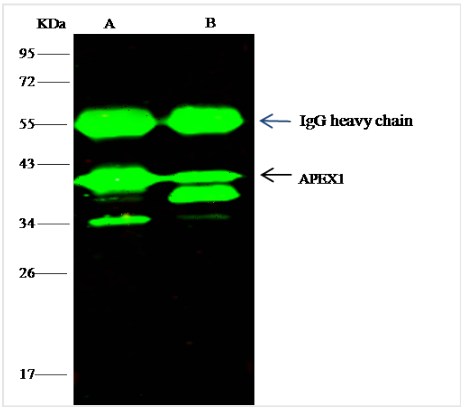
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255562	Rabbit	Human	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

APE1/APEX1; Polyclonal Antibody; Anti-APE1/APEX1 Antibody; Rabbit Polyclonal; APEX1/APE1/Ref-1 Antibody; Rabbit PAb; Antigen Affinity Purified; APEX nuclease (multifunctional DNA repair enzyme) 1; Anti-APE Antibody; Anti-APE1 Antibody; Anti-APEN Antibody; Anti-APEX Antibody; Anti-APX Antibody; Anti-HAP1 Antibody; Anti-REF1 Antibody; anti-APEX1 antibody

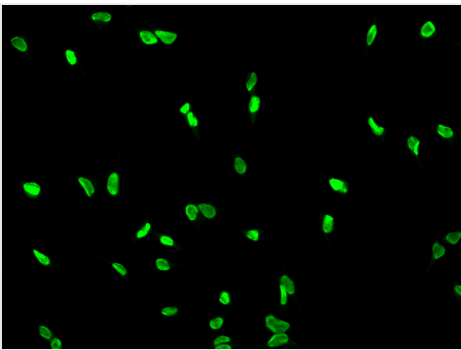
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human APEX1/APE1/Ref-1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-APEX1 antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human APEX1/APE1/Ref-1 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human APEX1/APE1/Ref-1 (rh APEX1/APE1/Ref-1). APEX1/APE1/Ref-1 specific IgG was purified by Human APEX1/APE1/Ref-1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.



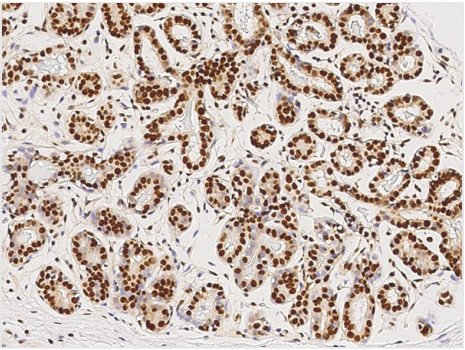
IP (Immunoprecipitation)

APEX1 was immunoprecipitated using: Lane A: 0.5 mg HeLa Whole Cell Lysate Lane B: 0.5 mg HepG2 Whole Cell Lysate 4 uL anti-APEX1 rabbit polyclonal antibody and 15 ul of 50 % Protein G agarose. Primary antibody: Anti-APEX1 rabbit polyclonal antibody, at 1:100 dilution Secondary antibody: DyLight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution Developed using the odyssey technique. Performed under reducing conditions. Predicted band size: 36 kDa Observed band size: 36 kDa



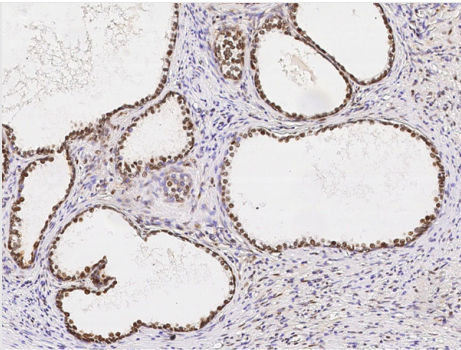
IF (Immunofluorescence)

Immunofluorescence staining of APEX1 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-human APEX1 polyclonal antibody (1:1000) at 4 degree C overnight. Then cells were stained with the Alexa Fluor488-conjugated Goat Anti-rabbit IgG secondary antibody (green). Positive staining was localized to nucleus.



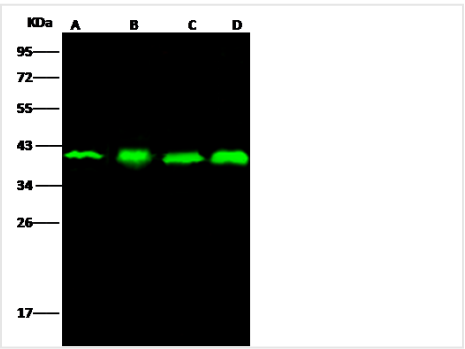
IHC (Immunohistochemistry)

Immunochemical staining of human APEX1 in human breast with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections).



IHC (Immunohistochemistry)

Immunochemical staining of human APEX1 in human prostate with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections).



WB (Western Blot)

Anti-APEX1 rabbit polyclonal antibody at 1:500 dilution Lane A: A431 Whole Cell Lysate Lane B: HepG2 Whole Cell Lysate Lane C: HeLa Whole Cell Lysate Lane D: Raji Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti- Rabbit & IgG H&L (DyLight 800) & at 1/10000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 36 kDa Observed band size: 39 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-APEX1 antibody	The enzyme is known to be a redox factor (Ref-1) stimulating DNA binding activity of AP-1 binding proteins such as Fos and Jun as well as a multifunctional DNA repair enzyme having 5' AP endonuclease, DNA 3' repair diesterase, 3'-5' exonuclease and DNA 3'-phosphatase activities. Although Apex mRNA was expressed ubiquitously, the levels varied significantly, suggesting organ-or tissue-specific expression of the Apex gene. The highest level was observed in the testis, relatively high levels in the thymus, spleen, kidney and brain, and the lowest level in the liver in rats. However, the present results suggested that APEX/Ref-1 gene product can interact with AP-1 binding proteins in brain, especially in the hippocampal formation, to regulate some brain functions by redox-activation.
References	Ono Y, et al. (1995) Developmental expression of APEX nuclease, a multifunctional DNA repair enzyme, in mouse brains. Brain Res Dev Brain Res.86 (1-2): 1-6. Tan Y, et al. (1996) cDNA cloning of rat major AP endonuclease (APEX nuclease) and analyses of its mRNA expression in rat tissues. Acta Med Okayama. 50 (1): 53-60. Yao M, et al. (1999) Genomic structure of the rat major AP endonuclease gene (Apex) with an adjacent putative O-sialoglycoprotease gene (Prsmg1/Gcpl1) and a processed Apex pseudogene (Apexp1). Acta Med Okayama. 53 (6): 245-52.

NCBI AND UNIPROT INFORMATION

NCBI GI #	346644849
NCBI GeneID	328
NCBI Accession #	NP_001231178.1
NCBI GenBank Nucleotide #	NM_001244249.1
UniProt Accession #	P27695; Q969L5; Q99775
Molecular Weight	35,555 Da
NCBI Official Full Name	DNA-(apurinic or apyrimidinic site) lyase
NCBI Official Synonym Full Names	APEX nuclease (multifunctional DNA repair enzyme) 1
NCBI Official Symbol	APEX1
NCBI Official Synonym Symbols	APE; APX; APE1; APEN; APEX; HAP1; REF1
NCBI Protein Information	DNA-(apurinic or apyrimidinic site) lyase; DNA-(apurinic or apyrimidinic site) lyase; AP lyase; protein REF-1; redox factor-1; AP endonuclease class I; apurinic-apyrimidinic endonuclease 1; apurinic/apyrimidinic (abasic) endonuclease; deoxyribonuclease (a
UniProt Protein Name	DNA-(apurinic or apyrimidinic site) lyase
UniProt Gene Name	APEX1
UniProt Synonym Gene Names	APE; APE1; APEX; APX; HAP1; REF1; APEN; AP endonuclease 1; APE-1
UniProt Entry Name	APEX1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ape1-apex1-antibody-immunoprecipitation-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/255562>