Datasheet for ABIN3043785

anti-APEX1 antibody (AA 2-318)

7 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	APEX1
Binding Specificity:	AA 2-318
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This APEX1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for DNA-(apurinic or apyrimidinic site) lyase(APEX1) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	E.coli-derived human APE1 recombinant protein (Position: P2-L318). Human APE1 shares 94% and 93% amino acid (aa) sequences identity with mouse and rat APE1, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for DNA-(apurinic or apyrimidinic site) lyase(APEX1) detection. Tested with WB, IHC-P in Human,Mouse,Rat. Gene Name: APEX nuclease (multifunctional DNA repair enzyme) 1 Protein Name: DNA-(apurinic or apyrimidinic site) lyase
Purification:	Immunogen affinity purified.

Target Details

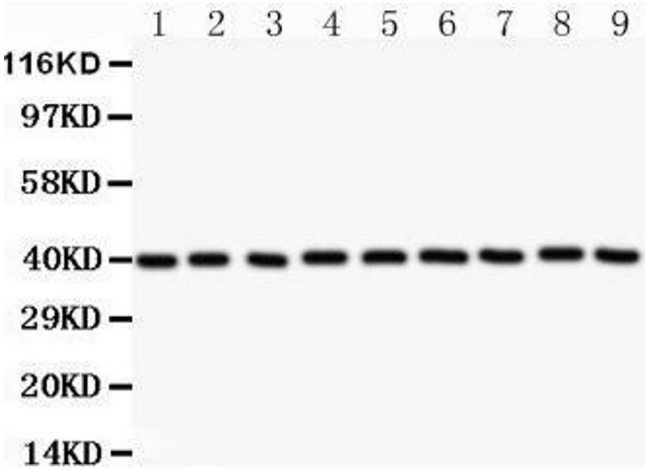
Target:	APEX1
Alternative Name:	APEX1 (APEX1 Products)
Background:	APEX1, also called apurinic endonuclease (APE), is a DNA repair enzyme having apurinic/apyrimidinic (AP) endonuclease, 3-prime, 5-prime-exonuclease, DNA 3-prime repair diesterase, and DNA 3-prime-phosphatase activities. The human APEX1 gene consists of 5 exons spanning 2.64 kb and exists as a single copy in the haploid genome. Using in situ hybridization, the APEX1 gene is mapped to 14q11.2-q12. The predicted APEX1 protein, which contained probable nuclear transport signals, was identified as a member of a family of DNA repair enzymes found in lower organisms. The abundance of the large form of APEX1 was increased in leiomyoma extracts relative to myometrial tissue extracts, and the large form was dominant in cell lines derived from leiomyosarcomas. The exonuclease activity of nuclear APEX1 can remove the anti-HIV nucleoside analogs AZT and D4T from the 3-prime terminus of a nick more efficiently than can cytosolic exonucleases. Synonyms: AP endonuclease 1 antibody|AP endonuclease class I antibody|AP lyase antibody|APE 1 antibody|APE antibody|APE-1 antibody|APEN antibody|APEX 1 antibody|APEX antibody|APEX nuclease (multifunctional DNA repair enzyme) 1 antibody|Apex nuclease 1 antibody|Apex nuclease antibody|APEX1 antibody|APEX1_HUMAN antibody|Apurinic endonuclease antibody|Apurinic-apyrimidinic endonuclease 1 antibody|Apurinic/apyrimidinic (abasic) endonuclease antibody|Apurinic/apyrimidinic endonuclease 1 antibody|Apurinic/apyrimidinic exonuclease antibody|APX antibody|BAP1 antibody|Deoxyribonuclease (apurinic or apyrimidinic) antibody|DNA (apurinic or apyrimidinic site) lyase antibody|DNA-(apurinic or apyrimidinic site) lyase, mitochondrial antibody|EC 4.2.99.18 antibody|HAP 1 antibody|HAP1 antibody|Human Apurinic endonuclease 1 antibody|MGC139790 antibody|Multifunctional DNA repair enzyme antibody|Redox factor 1 antibody|Redox factor-1 antibody|REF 1 antibody|REF 1 protein antibody|REF-1 antibody|REF1 antibody|REF1 protein antibody
Gene ID:	328
UniProt:	P27695
Pathways:	DNA Damage Repair, Chromatin Binding, Cell RedoxHomeostasis, Smooth Muscle Cell Migration, Positive Regulation of Response to DNA Damage Stimulus

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat, The detection limit for APE1 is approximately 0.25 ng/lane under reducing conditions. IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

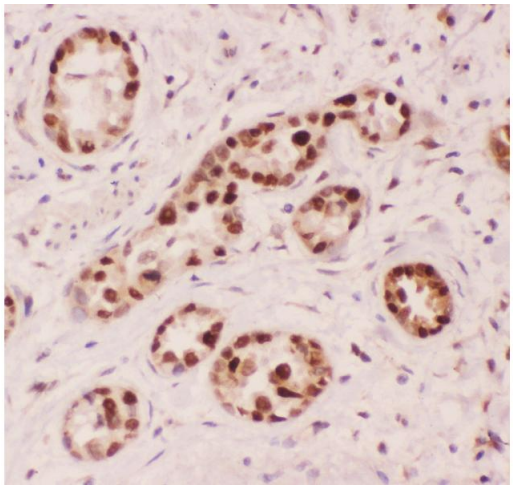
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.



Western Blotting

Image 1.



Immunohistochemistry

Image 2. Anti-APE1 Picoband antibody, IHC(P): Human Lung Cancer Tissue

Western Blotting

Image 3. Anti-APE1 Picoband antibody, All lanes: Anti APEX1 at 0.5ug/ml WB: Recombinant Human APEX1 Protein 0.5ng Predicted bind size: 45KD Observed bind size: 45KD

Please check the product details page for more images. Overall 7 images are available for ABIN3043785.