

Anti-APEX1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

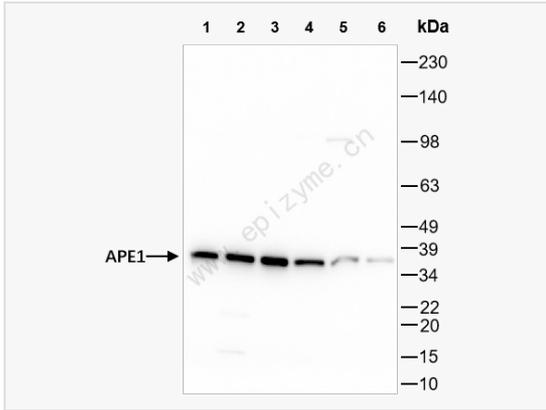
Catalog # R015417

Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	89T38D29
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human APE1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-APEX1 Rabbit mAb [89T38D29] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	AP endonuclease 1; AP endonuclease class I; AP lyase; APE 1; APE; APE-1; APEN; APEX 1; APEX; APEX nuclease (multifunctional DNA repair enzyme) 1; Apex nuclease 1; APEX nuclease; APEX1; APEX1_HUMAN; Apurinic endonuclease; Apurinic-apyrimidinic endonuclease 1; Apurinic/apyrimidinic (abasic) endonuclease; Apurinic/apyrimidinic endonuclease 1; Apurinic/apyrimidinic exonuclease; APX; BAP1; Deoxyribonuclease (apurinic or apyrimidinic); DNA (apurinic or apyrimidinic site) lyase; DNA-(apurinic or apyrimidinic site) lyase, mitochondrial; EC 4.2.99.18; HAP 1; HAP1; Human Apurinic endonuclease 1; MGC139790; Multifunctional DNA repair enzyme; Redox factor 1; Redox factor-1; REF 1; REF 1 protein; REF-1; REF1; REF1 protein.
Calculated MW	Calculated MW: 36 kDa; Observed MW: 36 kDa
Uniprot ID	P27695
Gene ID	328
Background	Apurinic/apyrimidinic (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]
Cellular Location	Mitochondrion. The cleaved APEX2 is only detected in mitochondria (By similarity). Translocation from the cytoplasm to the mitochondria is mediated by ROS signaling and cleavage mediated by granzyme A. Tom20-dependent translocated mitochondrial APEX1 level is significantly increased after genotoxic stress and Nucleus. Nucleus. nucleolus. Nucleus sneckle.



Western Blot - Anti-APEX1 Rabbit mAb [89T38D29]

All lanes: R015417 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: 293T (Human embryonic kidney cell) whole cell lysates

Lane 5: K562 (Human chronic myeloid leukemia cell) whole cell lysates

Lane 6: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates

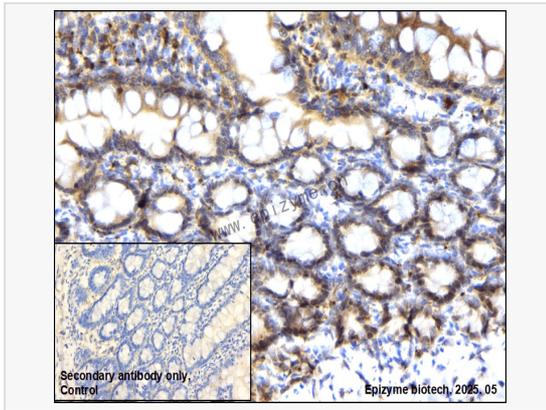
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 36 kDa

Observed band size: 36 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-APEX1 Rabbit mAb [89T38D29]

Sample: Paraformaldehyde-fixed, paraffin embedded rat colon tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

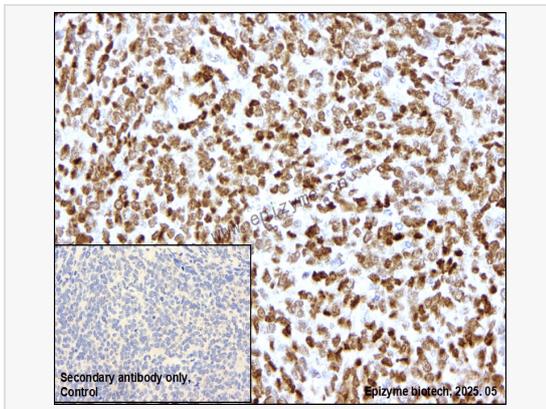
Primary antibody: R015417 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-APEX1 Rabbit mAb [89T38D29]

Sample: Paraformaldehyde-fixed, paraffin embedded human ovarian cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

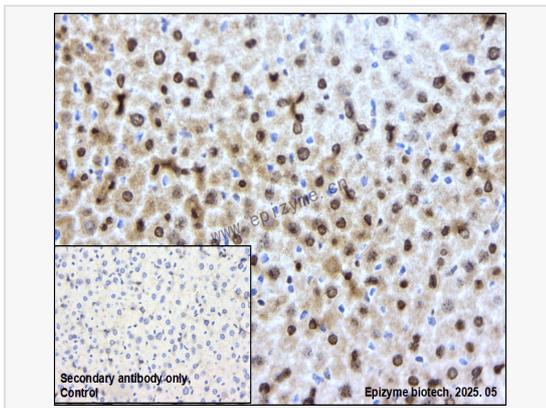
Primary antibody: R015417 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-APEX1 Rabbit mAb [89T38D29]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse liver tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015417 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.