

## Allgemeine Informationen

<b>Katalog-Nr.:</b> 10323-1-AP	<b>GenBank-Zugangsnummer:</b> BC004979	<b>Reinigungsmethode:</b> Antigen-Affinitätsreinigung
<b>Größe:</b> 150ul , Konzentration: 800 µg/ml von Nanodrop und 367 µg/ml durch die Bradford-Methode mit BSA als Standard;	<b>GeneID (NCBI):</b> 328	<b>Empfohlene Verdünnungen:</b> WB 1:500-1:1000 IP 0.5-4.0 ug für IP und 1:500-1:1000 für WB IHC 1:20-1:200 IF 1:20-1:200
<b>Wirt:</b> Kaninchen	<b>Vollständiger Name:</b> APEX nuclease (multifunctional DNA repair enzyme) 1	
<b>Isotyp:</b> IgG	<b>Berechnete Masse:</b> 36 kDa	
<b>Immunogen Katalognummer:</b> AG0397	<b>Beobachtete Masse:</b> 36 kDa	

## Anwendungen

<b>Geprüfte Anwendungen:</b> IF, IHC, IP, WB, ELISA	<b>Positivkontrollen:</b>
<b>Getestete Reaktivität:</b> Human, Maus, Ratte	<b>WB :</b> HepG2-Zellen, HEK-293-Zellen, HeLa-Zellen, K-562-Zellen, Mausebergewebe, Raji-Zellen
<b>Hinweis-IHC: Antigenmaskierung mit TE-Puffer pH 9,0 empfohlen. (*) Wahlweise kann die Antigenmaskierung auch mit Citratpuffer pH 6,0 erfolgen.</b>	<b>IP :</b> HepG2-Zellen, <b>IHC :</b> humanes Zervixkarzinomgewebe, <b>IF :</b> HepG2-Zellen,

## Hintergrundinformationen

APEX1, also named as APE, APE1, HAP1 and REF-1, belongs to the DNA repair enzymes AP/ExoA family. It is a multifunctional protein that plays a central role in the cellular response to oxidative stress. The two major activities of APEX1 are in DNA repair and redox regulation of transcriptional factors. APEX nuclease is a DNA repair enzyme having apurinic/aprimidinic (AP) endonuclease, 3-prime,5-prime-exonuclease, DNA 3-prime repair diesterase, and DNA 3-prime-phosphatase activities. On the other hand, APEX1 also exerts reversible nuclear redox activity to regulate DNA binding affinity and transcriptional activity of transcriptional factors by controlling the redox status of their DNA-binding domain, such as the FOS/JUN AP-1 complex after exposure to IR. APEX1 is involved in calcium-dependent down-regulation of parathyroid hormone (PTH) expression by binding to negative calcium response elements (nCaREs). When acetylated at Lys-6 and Lys-7, APEX1 stimulates the YBX1-mediated MDR1 promoter activity, leading to drug resistance. It also acts as an endoribonuclease involved in the control of single-stranded RNA metabolism. It plays a role in regulating MYC mRNA turnover by preferentially cleaving in between UA and CA dinucleotides of the MYC coding region determinant (CRD). In association with NMD1, APEX1 plays a role in the rRNA quality control process during cell cycle progression. 10323-1-AP is a rabbit polyclonal antibody raised against a fusion protein corresponding to an internal region of human APEX1.

## Lagerung

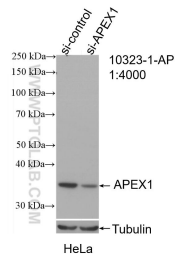
**Lagerungsbedingungen:**  
Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil  
**Lagerungspuffer:**  
PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.  
Aliquotieren ist nicht notwendig bei -20°C Lagerung

\*\*\* 20ul-Größen enthalten 0.1% BSA

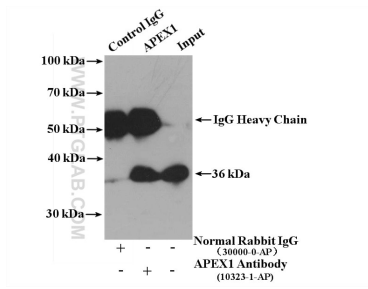
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
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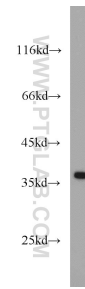
## Ausgewählte Validierungsdaten



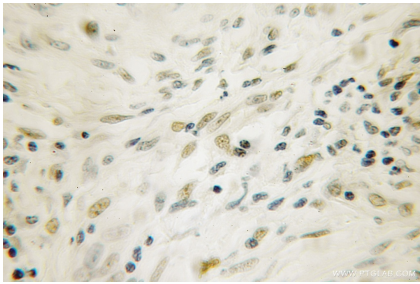
WB result of APEX1 antibody (10323-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-APEX1 transfected HeLa cells.



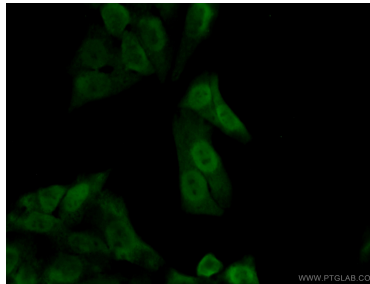
IP result of anti-APEX1 (IP:10323-1-AP, 4ug; Detection:10323-1-AP 1:500) with HepG2 cells lysate 2200 ug.



HepG2 cells were subjected to SDS PAGE followed by western blot with 10323-1-AP (APEX1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human cervical cancer using 10323-1-AP (APEX1 antibody) at dilution of 1:50 (under 10x lens).



Immunofluorescent analysis of HepG2 cells using 10323-1-AP (APEX1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).