

## Product datasheet for **TA301441**

### **APE1 (APEX1) Rabbit Polyclonal Antibody**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Applications:</b>	Block/Neutralize, ChIP, FC, ICC/IF, IHC, IP, Simple Western, WB
<b>Recommended Dilution:</b>	Chromatin Immunoprecipitation (ChIP): 1:10-1:500, Immunohistochemistry: 1:100, Immunocytochemistry/ Immunofluorescence: 1:50-1:200, Immunoprecipitation: 7 ug/ml, Western Blot: 1:1000, Immunohistochemistry-Paraffin: 1:100, Immunohistochemistry-Frozen: 1:100, Simple Western: 1:12.5, Flow Cytometry, Immunohistochemistry Free-Floating, Block/Neutralize
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Clonality:</b>	Polyclonal
<b>Immunogen:</b>	Affinity purified human Apurinic/Apyrimidinic Endonuclease (APE/ref-1) fusion protein.
<b>Formulation:</b>	Tris-glycine, 150mM NaCl and 0.05% sodium azide
<b>Purification:</b>	Affinity purified
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Gene Name:</b>	apurinic/aprimidinic endodeoxyribonuclease 1
<b>Database Link:</b>	<a href="#">NP_001632</a> <a href="#">Entrez Gene 11792 Mouse</a> <a href="#">Entrez Gene 79116 Rat</a> <a href="#">Entrez Gene 328 Human</a> <a href="#">P27695</a>

**Background:** The mammalian apurinic/aprimidinic endonuclease (APE/ref-1) is responsible for the repair of AP sites in DNA. In addition, this enzyme has been shown to function as a redox factor facilitating the DNA binding capability of FOS, JUN, NfκB, HIF-1α as well as other transcription factors. Recently, APE has also been shown to control p53 activity through redox alteration. APE is also linked to apoptosis, associated with thioredoxin, and altered levels of APE have been found in some cancers. APE appears to form a unique link between the DNA base excision pathway, oxidative signaling, transcription regulation, cancer and cell-cycle control.



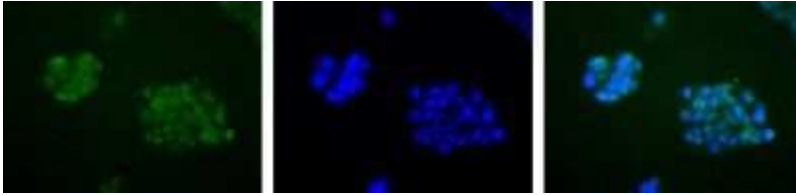
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**Synonyms:** APE; APE1; APEN; APEX; APX; HAP1; REF1

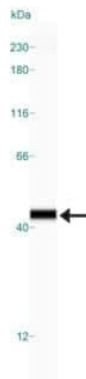
**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**Protein Pathways:** Base excision repair

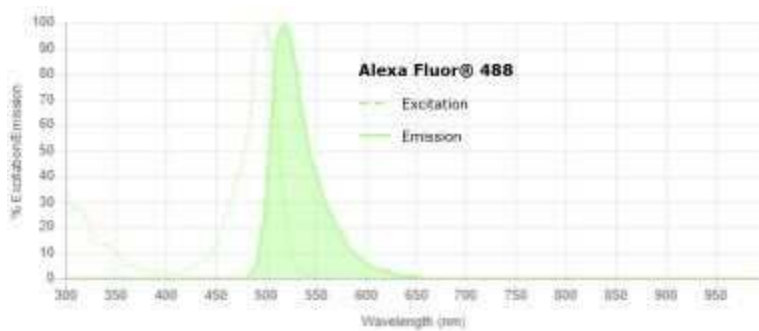
**Product images:**



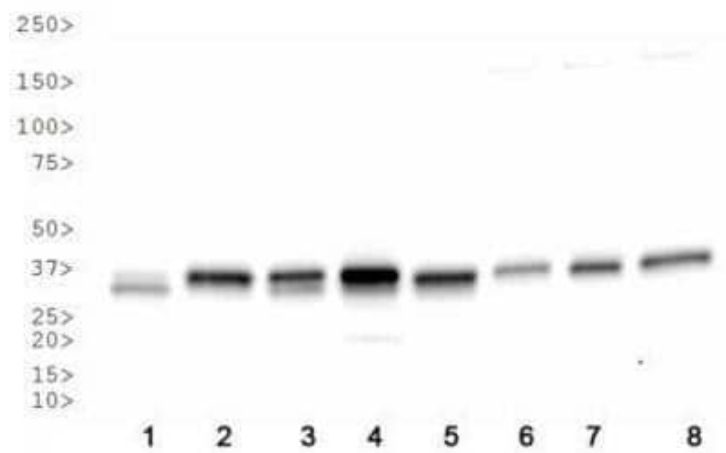
Immunocytochemistry/Immunofluorescence: APE Antibody TA301441 - Detection of APE1 (Green) in HepG2 cells using TA301441. Nuclei (Blue) are counterstained with Hoechst 33258.



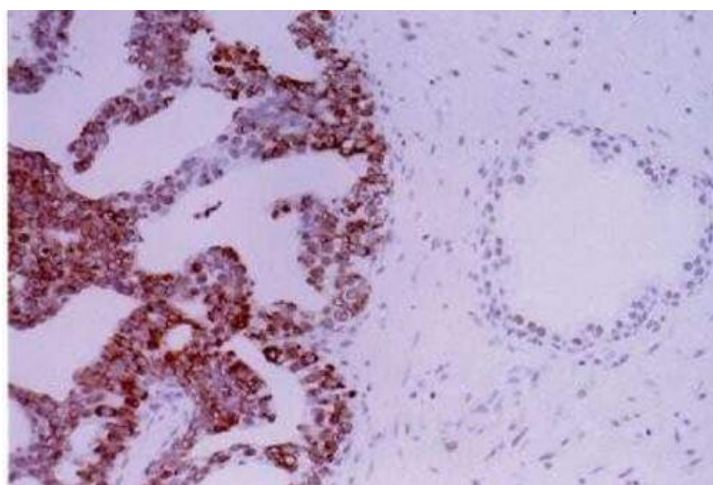
Simple Western: APE Antibody TA301441 - Lane view shows a specific band for APE1 in 0.1 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Flow Cytometry: APE Antibody TA301441 - Spectral properties of Alexa Fluor(R) 488: an excitation maximum of 490 nm and an emission maximum of 525 nm. Use the Novus Spectra Viewer to identify the optimal laser(s) and filters for Alexa Fluor(R) 488 and to determine its compatibility with other fluorophores when designing a multicolor experiment. <https://www.novusbio.com/spectraviewer>



Western Blot: APE Antibody TA301441 - Analysis of APE1 in cell lysates: 1. HeLa, 2. Ntera2, 3. A431, 4. HepG2, 5. MCF7, 6. NIH 3T3, 7. PC12, and 8. Cos 7.



Immunohistochemistry: APE Antibody TA301441 - Immunohistochemical staining of APE-ref-1 in prostate cancer.