

# Product information



## APEX1, 1-318 aa

Human, T7-tagged, Recombinant, *E.coli*

Cat. No. IBATGP0881

**Full Name:** APEX nuclease (multifunctional DNA repair enzyme) 1

**NCBI Accession No.:** AAH19291

**Synonyms:** APE, APE1, APEN, APX, HAP1, REF-1, REF1

**Description:** APEX1, also known as REF1 or APE1 (Apurinic / apyrimidinic endonuclease), is responsible for the incision of DNA basic sites during base excision repair. It has also been shown to stimulate the DNA binding activity of numerous transcription factors that are involved in cancer promotion and progression. APEX1 is part of the cellular response to oxidative stress and protects cells from the genotoxic and cytotoxic effect of oxidizing agents. Recombinant human APEX1 protein, fused to T7-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.2M NaCl,

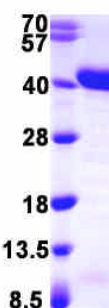
2mM DTT, 10% glycerol

**Molecular Weight:** 36.9 kDa (332aa) confirmed by MALDI-TOF

**Purity:** > 90% by SDS - PAGE

**Concentration:** 1 mg/ml (determined by Bradford assay)

(kDa)



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MASMTGGQQM GRGSMPKRGK KGAVAEDGDE LRTEPEAKKS KTAACKNDKE AAGEGPALYE DPPDQKTSPS GKPATLKICS WNV DGLRAWI  
KKKGLDWVKE EAPDILCLQE TKCSENKLP A ELQELPGLSH QYWSAPSDKE GYSGVGLLSR QCPLKVS YGI GEEH DQEGR VIVA E FDSFV  
LVTAYVPNAG RGLVRLEYRQ RWDEAFRKFL KGLASRKPLV LCGDLNVAHE EIDL RNP KGN KKNAGFTPQE RQGF GELLQA VPLAD SFRHL  
YPNTPYAYTF WTYMMNARSK NVGWRLDYFL LSHLLPALC DSKIRSKALG SDHCPITLYL AL

### General references:

Hinz AK., *et al.* (2010) *J Biol Chem.* 285(37):28683-90.

**WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.**

# Product information

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Wu HH., *et al.* (2010) *Oncogene*. 29(30):4330-40.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.  
Avoid repeated freezing and thawing cycles.

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