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Datasheet for ABIN7317385 **APEX1 Protein (His tag)**

Overview

Quantity:	100 µg
Target:	APEX1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This APEX1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human APE1/APE Protein (His Tag)
Sequence:	Pro2-Leu 318
Characteristics:	A DNA sequence encoding the human APEX1 (P27695) (Pro2-Leu 318) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 92 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	APEX1
Alternative Name:	APE1/APE (APEX1 Products)
Background:	Background: The enzyme is known to be a redox factor (Ref-1) stimulating DNA binding activity of AP-1 binding proteins such as Fos and Jun as well as a multifunctional DNA repair enzyme having 5' AP endonuclease, DNA 3' repair diesterase, 3'-5' exonuclease and DNA 3'-phosphatase

Target Details

activities. Although Apex mRNA was expressed ubiquitously, the levels varied significantly, suggesting organ- or tissue-specific expression of the Apex gene. The highest level was observed in the testis, relatively high levels in the thymus, spleen, kidney and brain, and the lowest level in the liver in rats. However, the present results suggested that APEX/Ref-1 gene product can interact with AP-1 binding proteins in brain, especially in the hippocampal formation, to regulate some brain functions by redox-activation.

Synonym: DNA-(Apurinic or Apyrimidinic Site) Lyase, APEX Nuclease, APEN, Apurinic-Apyrimidinic Endonuclease 1, AP Endonuclease 1, APE-1REF-1, Redox Factor-1, APEX1, APE, APE1, APEX, APX, HAP1, REF1

Molecular Weight:	37 kDa
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UniProt:	P27695
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Pathways:	DNA Damage Repair , Chromatin Binding , Cell Redox Homeostasis , Smooth Muscle Cell Migration , Positive Regulation of Response to DNA Damage Stimulus
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Reconstitution:	Please refer to the printed manual for detailed information.
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Buffer:	Lyophilized from sterile PBS, pH 7.5
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Storage:	4 °C, -20 °C, -80 °C
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Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
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