



Human DNA-(apurinic or apyrimidinic site) lyase (APEX1) ELISA kit

Product Code	CSB-EL001900HU
Abbreviation	APEX1
Protein Biological Process 1	DNA damage/DNA repair
Target Name	APEX nuclease (multifunctional DNA repair enzyme) 1
Uniprot No.	P27695
Alias	APE, APE1, APEN, APEX, APX, HAP1, REF1, AP endonuclease class I AP lyase APEX nuclease 1 DNA-(apurinic or apyrimidinic site) lyase apurinic/apyrimidinic (abasic) endonuclease apurinic/apyrimidinic e
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	DNA damage
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Others
Gene Names	APEX1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human APEX1 ELISA Kit was designed for the quantitative measurement of Human APEX1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 3.9 pg/mL.
Target Details	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.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human APEX1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
	Average %	104
1:1	Range %	93-108
	Average %	104
1:2	Range %	95-107
	Average %	91
1:4	Range %	84-95
	Average %	92
1:8	Range %	84-95

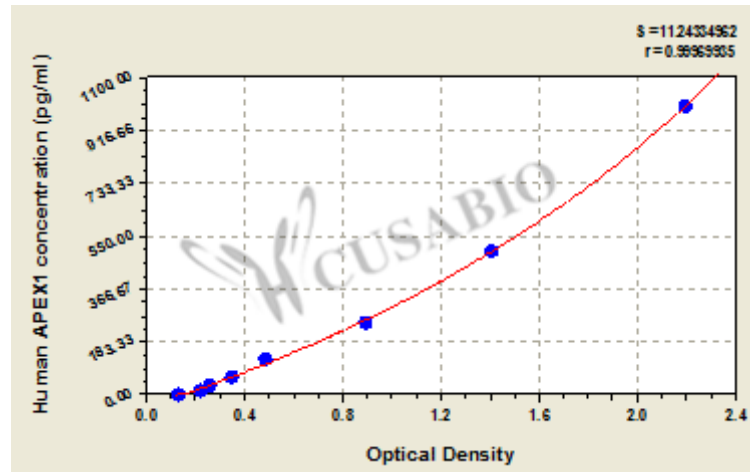
Recovery

The recovery of human APEX1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	100	89-105
EDTA plasma (n=4)	104	93-108

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
1000	2.253	2.155	2.204	2.058
500	1.398	1.434	1.416	1.270
250	0.916	0.900	0.908	0.762
125	0.507	0.487	0.497	0.351
62.5	0.351	0.366	0.359	0.213
31.25	0.268	0.272	0.270	0.124
15.6	0.229	0.234	0.232	0.086
0	0.147	0.145	0.146	?

Msds

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