





# Human Alpha-fetoprotein, AFP ELISA Kit

Product Code	CSB-E04770h
Abbreviation	AFP
Protein Biological Process 1	Tumor marker
Target Name	alpha-fetoprotein
Uniprot No.	P02771
Alias	FETA, HPAFP, OTTHUMP00000160480 alpha-1-fetoprotein alpha-fetoglobulin
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
<b>Detection Range</b>	1.563 ng/mL-100 ng/mL
Sensitivity	1.332 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
<b>Detection Wavelength</b>	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	Cancer
Gene Names	AFP
Tag Info	quantitative
<b>Protein Description</b>	Sandwich
Description	This Human AFP ELISA Kit was designed for the quantitative measurement of Human AFP protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 1.563 ng/mL-100 ng/mL and the sensitivity is 1.332 ng/mL

ng/mL and the sensitivity is 1.332 ng/mL.

### **Target Details**

This gene encodes alpha-fetoprotein, a major plasma protein produced by the yolk sac and the liver during fetal life. Alpha-fetoprotein expression in adults is often associated with hepatoma or teratoma. However, hereditary persistance of alpha-fetoprotein may also be found in individuals with no obvious pathology. The protein is thought to be the fetal counterpart of serum albumin, and the alpha-fetoprotein and albumin genes are present in tandem in the same transcriptional orientation on chromosome 4. Alpha-fetoprotein is found in monomeric as well as dimeric and trimeric forms, and binds copper, nickel, fatty acids and bilirubin. The level of alpha-fetoprotein in amniotic fluid is used to measure renal loss of protein to screen for spina bifida and anencephaly.





#### **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.

4J	Intra-Assay Precision-₽			Inter-Assay Precision≠		
Sample₽	1₽	2₽	3₽	10	2₽	3₽
n⁴³	20₽	20-7	20₽	20₽	20₽	20₽
Mean(ng/ml)≠	14.459	13.752-	12.130+	14.073₽	14.062₽	13.749₽
SD€	0.021₽	0.029₽	0.039₽	0.011₽	0.024	0.018₽
<u>C</u> V(%)₽	3.501₽	5.060₽	7.450₽	1.848₽	4.060₽	3.145₽

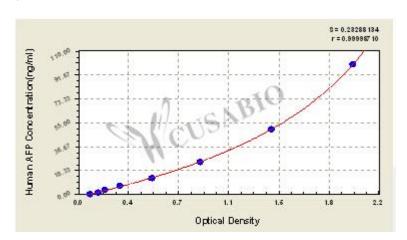
#### Linearity

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

₽ <sup>3</sup>	Sample⊎	Serum(n=4)-₽	0
1:1₽	Average %₽	94₽	
1:14	Range %₽	82-105-7	
10-	Average %₽	96₽	
1:2₽	Range %	91-101₽	7
1.4.5	Average %↔	93₽	- 8
1:4₽	Range %₽	85-105₽	- 8
1:8₽	Average %₽	95↔	- 3
1:042	Range %↔	90-100₽	

#### **Typical**

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





## **CUSABIO TECHNOLOGY LLC**



ng/ml+²	OD1₽	OD2₽	Average⊎	Corrected⊲
0₽	0.096₽	0.092₽	0.094₽	4
1.563₽	0.156₽	0.155₽	0.156₽	0.062₽
3.125₽	0.205₽	0.204	0.2054	0.111₽
6.25₽	0.299	0.329	0.314	0.220₽
12.5₽	0.556₽	0.534	0.545₽	0.451₽
25₽	0.892	0.906₽	0.899₽	0.805₽
50₽	1.354₽	1.483₽	1.419₽	1.325₽
100₽	1.997₽	2.039₽	2.018₽	1.924₽

**Msds** 

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