



Human secreted frizzled-related protein 4(SFRP4) ELISA Kit

Product Code	CSB-E13721h
Abbreviation	SFRP4
Protein Biological Process 1	Developmental Protein
Target Name	secreted frizzled-related protein 4
Uniprot No.	Q6FHJ7
Alias	FRP-4, FRPHE, MGC26498, secreted frizzled-related protein 4 secreted frizzled-related protein 4; secreted frizzled-related protein 4
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Differentiation
Sample Types	serum, plasma, tissue homogenates
Detection Range	1.56 ng/mL-100ng/mL
Sensitivity	0.39 ng/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	Stem Cells
Gene Names	SFRP4
Tag Info	quantitative
Protein Description	Sandwich

Description

This human SFRP4 ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of human SFRP4 in multiple samples, including serum, plasma, or tissue homogenates. It also uses the enzyme-substrate chromogenic reaction to visualize and analyze the analyte levels through the color intensity. The intensity of the colored product is in direct proportion to the SFRP4 levels in the sample and is measured at 450 nm through a microplate reader.

SFRP4 is expressed in the intestinal tract, endometrium, pancreas, stomach, liver, heart, and mammary gland. Ample studies have shown that SFRP4



regulates apoptosis and differentiation of tumor cells and is an important antagonist of the Wnt pathway. Loss of SFRP4 expression has been observed in most tumors, including ovarian cancer, malignant pituitary tumors, endometrial cancer, and acute myeloid leukemia. However, upregulation of SFRP4 is found in chemotherapy-sensitive ovarian cancer and breast cancer. Additionally, SFRP4 is implicated in many diseases including obesity, type 2 diabetes (T2D), and cancer.

Target Details

Secreted frizzled-related protein 4 (SFRP4) is a member of the SFRP family that contains a cysteine-rich domain homologous to the putative Wnt-binding site of Frizzled proteins. SFRPs act as soluble modulators of Wnt signaling. The expression of SFRP4 in ventricular myocardium correlates with apoptosis related gene expression.

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 SFRP4 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)
1:5	Average %	95
	Range %	91-99
1:10	Average %	100
	Range %	95-105
1:20	Average %	92
	Range %	88-97
1:40	Average %	88
	Range %	82-92

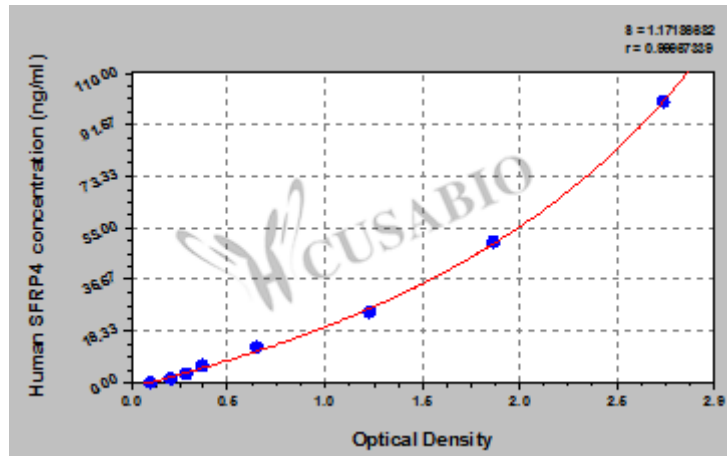
Recovery

The recovery of human SFRP4 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)	90	83-95
EDTA plasma (n=4)	99	94-103

Typical

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



ng/ml	OD1	OD2	Average Corrected	
100	2.712	2.652	2.682	2.570
50	1.885	1.776	1.831	1.719
25	1.212	1.204	1.208	1.096
12.5	0.621	0.664	0.643	0.531
6.25	0.383	0.357	0.370	0.258
3.12	0.297	0.278	0.288	0.176
1.56	0.209	0.212	0.211	0.099
0	0.116	0.107	0.112	?

Msds

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