



Human Vascular Endothelial cell Growth Factor C, VEGF-C ELISA KIT

Product Code	CSB-E04759h
Abbreviation	VEGFC
Protein Biological Process 1	Angiogenesis
Target Name	vascular endothelial growth factor C
Uniprot No.	P49767
Alias	Flt4-L, VRP, FLT4 ligand DHM vascular endothelial growth factor-related protein
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Angiogenesis
Sample Types	serum, plasma, tissue homogenates
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	Cancer
Gene Names	VEGFC
Tag Info	quantitative
Protein Description	Sandwich

Description

The human VEGFC ELISA Kit is engineered for accurate measurement of human VEGFC levels from samples including serum, plasma, or tissue homogenates. It uses the Sandwich-ELISA mechanism in combination with the enzyme-substrate chromogenic reaction to measure the VEGFC content in the sample. The color intensity is positively correlated with VEGFC content in the sample. The VEGFC concentration can be calculated according to the standard curve. This kit is tested with high sensitivity, strong specificity, good linearity, high precision and recovery, as well as lot-to-lot consistency.

The VEGFC signaling through VEGFR-3 is essential for leukemic cell proliferation, survival, and resistance to chemotherapy. VEGFC is considered as



a tumor lymphangiogenic factor based on the effects of activated VEGF-R3 on lymphatic endothelial cells. In several types of solid tumors, activation of the VEGFC/VEGFR-3 axis increases cancer cell mobility and invasion capabilities, facilitating cancer cell metastasis. VEGFC expression has been associated with advanced metastasis in colorectal cancer and plays a role in lymphangiogenesis and/or metastasis to lymph nodes in multiple types of cancer, including colorectal and breast cancer.

Target Details

This protein is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family, is active in angiogenesis and endothelial cell growth, and can also affect the permeability of blood vessels. This secreted protein undergoes a complex proteolytic maturation, generating multiple processed forms which bind and activate VEGFR-3 receptors. Only the fully processed form can bind and activate VEGFR-2 receptors. This protein is structurally and functionally similar to vascular endothelial growth factor D.

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 VEGF-C 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)
1:1	Average %	100
	Range %	96-105
1:2	Average %	92
	Range %	87-99
1:4	Average %	95
	Range %	90-101
1:8	Average %	92
	Range %	88-96

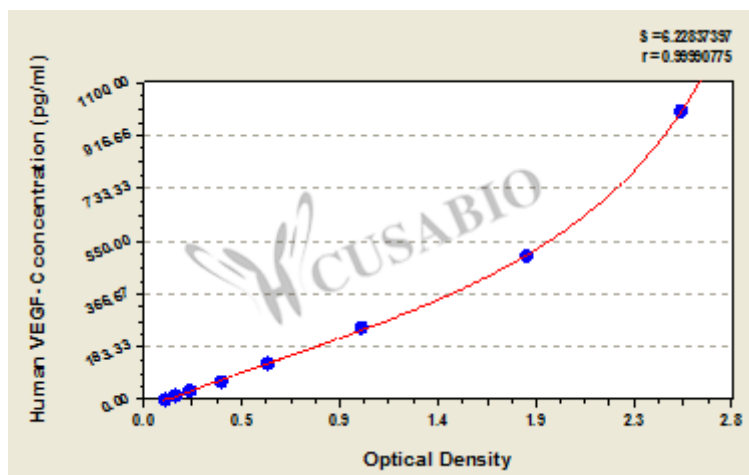
Recovery

The recovery of human VEGF-C 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)	99	94-106
EDTA plasma (n=4)	90	84-96

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	2.575	2.543	2.559	2.446
500	1.880	1.776	1.828	1.715
250	1.051	1.034	1.043	0.930
125	0.613	0.587	0.600	0.487
62.5	0.387	0.371	0.379	0.266
31.2	0.235	0.226	0.231	0.118
15.6	0.169	0.158	0.164	0.051
0	0.115	0.111	0.113	?

Msds

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