Human vascular endothelial cell growth factor receptor 1 (VEGFR-1/Flt1) ELISA kit

Product Code	CSB-E11885h
Abbreviation	VEGFR-1/Flt1
Target Name	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) _x000D_
Uniprot No.	P17948
Alias	Flt1, FLT, VEGFR1, fms-related tyrosine kinase 1|vascular endothelial growth factor receptor 1_x000D_
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 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	Cardiovascular
Gene Names	FLT1
Tag Info	quantitative
Protein Description	Sandwich

Description

The human VEGFR-1 ELISA Kit is used to quantitatively measure human VEGFR-1 concentrations in serum, plasma, or tissue homogenates. It performs well in important characteristics, including sensitivity, specificity, precision, recovery, linearity, and lot-to-lot consistency. This assay is based on the sandwich ELISA mechanism and enzyme-substrate chromogenic reaction. The solution color develops proportionally to the amount of VEGFR-1 in the sample. And the intensity of the color can be measured at 450 nm via a microplate reader.

VEGFR-1, also called Flt-1, is a high-affinity tyrosine kinase receptor for VEGFs, including VEGF-A, VEGF-B, and PIGF. Distinct from VEGFR-2, which participates both in physiological and pathological angiogenesis, VEGFR-1 in the adult is necessary only for pathological angiogenesis. VEGFR-1-VEGF plays an essential role in tumor-related angiogenesis, tissue infiltration, and

metastasis formation. Furthermore, VEGFR-1 activation contributes to the recruitment of tumor-associated macrophages (TAMs), cancer immune escape, and stimulation of migration and extracellular matrix (ECM) invasion.

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 VEGFR-1 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 %	86
	Range %	81-93
1:2	Average %	99
	Range %	94-104
1:4	Average %	92
	Range %	88-97
1:8	Average %	85
	Range %	81-90

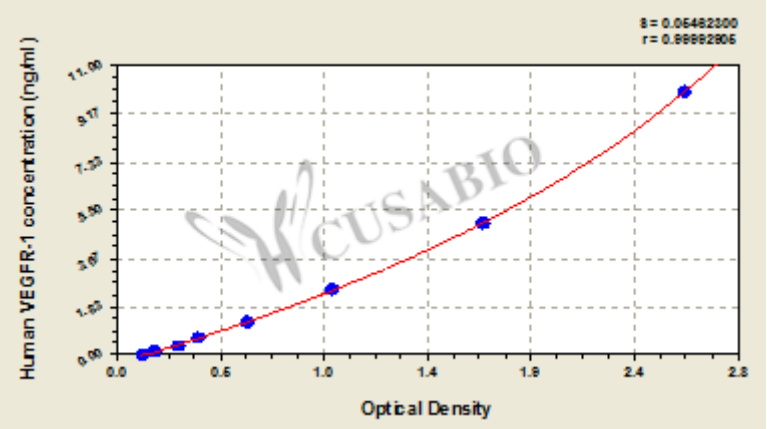
Recovery

The recovery of human VEGFR-1 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	85-96
EDTA plasma (n=4)	96	92-100

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
10	2.486	2.698	2.592	2.460
5	1.685	1.667	1.676	1.544
2.5	0.986	0.997	0.992	0.860
1.25	0.600	0.612	0.606	0.474
0.625	0.396	0.376	0.386	0.254
0.312	0.282	0.299	0.291	0.159
0.156	0.190	0.176	0.183	0.051
0	0.131	0.133	0.132	?

Msds

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