Human very low density lipoprotein(VLDL)ELISA Kit

Product Code	CSB-E17087h
Abbreviation	VLDL
Target Name	very low density lipoprotein(VLDL)
Alias	N/A
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.78 μg/mL-50 μg/mL
Sensitivity	0.195 μg/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
Tag Info	quantitative
Protein Description	Competitive

Description

The human VLDL ELISA Kit is used to quantitatively measure human VLDL 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 competitive ELISA mechanism and enzyme-substrate chromogenic reaction. The solution color develops negatively to the amount of VLDL in the sample. And the intensity of the color can be measured at 450 nm via a microplate reader.

VLDL is made by the liver and released into the bloodstream. It is a lipoprotein rich in triacylglycerols (TAGs). VLDL is commonly regarded as bad cholesterol. The body needs some VLDL to run properly. VLDL carries different types of fats, primarily circulatory triglycerides, to cells and tissues. However, excess VLDL can increase the risk of developing health conditions, including heart failure. Overproduction or delayed clearance of VLDL is considered as causing hypertriglyceridemia. VLDL is involved in cardiac remodeling but also causes ventricular function impairment. VLDL engagement with its receptor VLDLR can induce the development of atherosclerosis.

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 VLDL 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)
1:200	Average %	97
	Range %	91-103
1:400	Average %	95
	Range %	91-99
1:800	Average %	94
	Range %	88-98
1:1600	Average %	105
	Range %	101-109

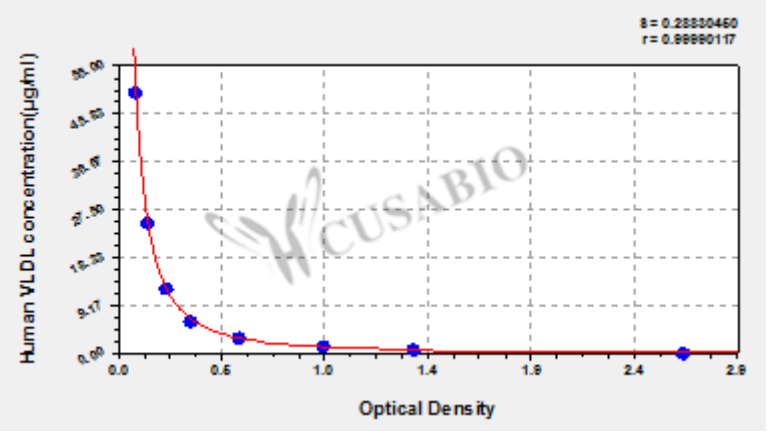
Recovery

The recovery of human VLDL 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)	91	87-95
EDTA plasma (n=4)	103	98-107

Typical

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



μg/ml	OD1	OD2	Average
50	0.086	0.088	0.087
25	0.140	0.146	0.143
12.5	0.229	0.234	0.232
6.25	0.338	0.348	0.343
3.12	0.576	0.554	0.565
1.56	0.991	0.927	0.959
0.78	1.392	1.354	1.373
0	2.568	2.684	2.626