Human CD5 Antigen-like(CD5L) ELISA Kit

Product Code	CSB-E13423h
Abbreviation	CD5L
Protein Biological Process 1	Apoptosis/Autophagy
Target Name	CD5 molecule-like
Uniprot No.	O43866
Alias	AIM, API6, PRO229, SP-ALPHA, Spalpha, CD5 antigen-like (scavenger receptor cysteine rich family)|apoptosis inhibitor 6
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Apoptosis
Sample Types	serum, plasma, tissue homogenates
Detection Range	6.25 ng/mL-400 ng/mL
Sensitivity	1.56 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	Cell Biology
Gene Names	CD5L
Tag Info	quantitative
Protein Description	Sandwich
Description	

The product CSB-E13423h is a sandwich ELISA kit developed to measure concentrations of human CD5L in serum, plasma, or tissue homogenates. This assay uses the sandwich enzyme immunoassay technique in combination with the enzyme-substrate chromogenic reaction to quantify the analyte in the sample. The color develops positively to the amount of CD5L in samples. The color intensity is measured at 450 nm via a microplate reader.

CD5L is a secreted protein produced mostly by macrophages in lymphoid and inflamed tissues. It plays a critical role in immune homeostasis and inflammatory disease. It is involved in various diseases such as lipid metabolic disease, hepatocellular carcinoma, fungus-induced peritonitis, acute kidney injury, and myocardial infarction. CD5L localizes to CD36 to promote the transcription of

genes involved in the regulation of mitochondrial biogenesis to maintain energy and metabolic homeostasis. CD5L also activates autophagy in macrophages while altering inflammatory phenotypes, specifically reducing TNF and IL-1 beta expression while elevating the immunosuppressive cytokine IL-10. Serum or plasma CD5L levels are increased in inflammatory conditions including liver cirrhosis, chronic hepatitis C, atopic dermatitis, and Kawasaki disease.

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 CD5L 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 %	88
	Range %	84-92
1:2	Average %	103
	Range %	96-107
1:4	Average %	92
	Range %	87-94
1:8	Average %	101
	Range %	97-104

Recovery	The recovery of human CD5L 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)	97	93-101
EDTA plasma (n=4)	93	87-97

Typical	These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.
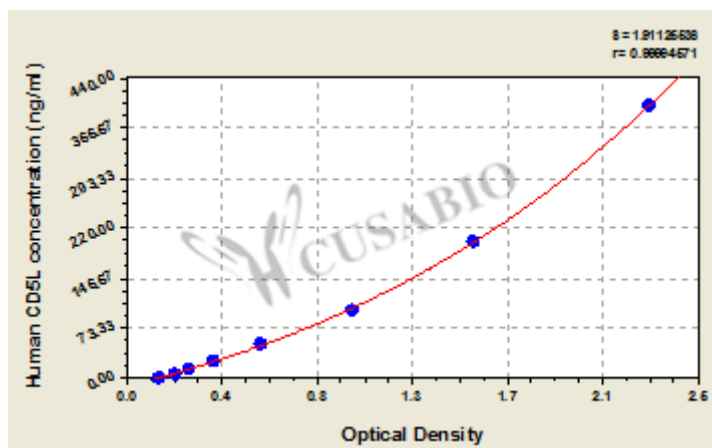
ng/ml	OD1	OD2	Average	Corrected
400	2.335	2.245	2.290	2.135
200	1.474	1.577	1.526	1.371
100	1.017	0.975	0.996	0.841
50	0.591	0.602	0.597	0.442
25	0.386	0.397	0.392	0.237
12.5	0.278	0.285	0.282	0.127
6.25	0.221	0.225	0.223	0.068
0	0.154	0.156	0.155	

Msds	{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E13423h.pdf","filename":"MSDS"}}