



Dog Interleukin 10, IL-10 ELISA Kit

Product Code	CSB-E11261c
Abbreviation	IL10
Target Name	interleukin 10
Uniprot No.	P48411
Alias	CSIF, IL-10, IL10A, MGC126450, MGC126451, TGIF, cytokine synthesis inhibitory factor
Product Type	ELISA Kit
Immunogen Species	Canis lupus familiaris (Dog) (Canis familiaris)
Sample Types	serum, plasma, tissue homogenates
Detection Range	1.56 pg/mL-100 pg/mL
Sensitivity	0.39 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	Immunology
Gene Names	IL10
Tag Info	quantitative
Protein Description	Sandwich

Description

This dog IL10 ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of dog IL10 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 IL10 levels in the sample and is measured at 450 nm through a microplate reader.

IL10 is an anti-inflammatory cytokine that is produced by many hematopoietic cells and mainly functions to inhibit macrophage and dendritic cell (DC) functions, which are necessary for the capture, control, and initiation of immune responses to pathogens. IL10 both impedes pathogen removal and improves immunopathology. IL-10 suppresses the expression of cytokines such as TNF- α , IL-1 β , and IL-8, and can repress the expression of adhesion molecules. In addition, IL-10 can deactivate monocytes by downregulating the expression of MHC surface molecules. IL10 also plays a role in the control of allergy and asthma.



Target Details

This protein is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. This cytokine can block NF-kappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract.

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 dog IL-10 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)
	Average %	97
1:1	Range %	92-108
	Average %	97
1:2	Range %	91-105
	Average %	89
1:4	Range %	84-96
	Average %	92
1:8	Range %	87-98

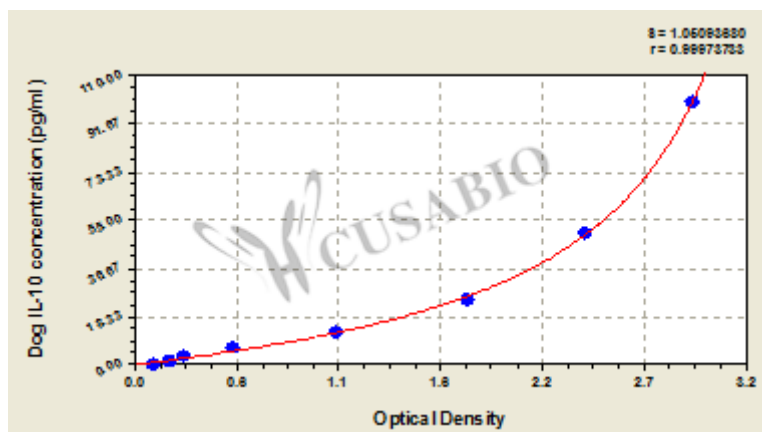
Recovery

The recovery of dog IL-10spiked 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	85-95
EDTA plasma (n=4)	92	87-96

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
100	2.954	2.967	2.961	2.853
50	2.388	2.398	2.393	2.285
25	1.758	1.786	1.772	1.664
12.5	1.035	1.109	1.072	0.964
6.25	0.502	0.546	0.524	0.416
3.12	0.271	0.267	0.269	0.161
1.56	0.184	0.196	0.190	0.082
0	0.112	0.103	0.108	?

Msds

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