

Human IL-10 Antibody Pair Set

Catalog No. E-KAB-0040

Applications

ELISA

Synonyms IL10, IL10A, CSIF, TGIF

Kit components & Storage

Title	Specifications	Storage
Human IL-10 Capture Antibody	1 vial, 100 μg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Human IL-10 Detection Antibody (Biotin)	1 vial, 50 μL	Store at -20°C for one year. Avoid freeze / thaw cycles.

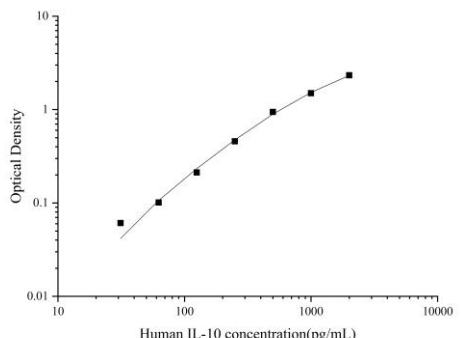
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0040)	
		Human IL-10 Capture Antibody	Human IL-10 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human IL-10 protein	Recombinant Human IL-10 protein
	Swissprot	P22301	
Product details	Reactivity	Human	Human
	Host	Mouse	Goat
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A or G	Antigen Affinity
	Specificity	Detects Human IL-10 in ELISAs.	

Applications

Human IL-10 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Human IL-10 Capture Antibody	 <p>The graph displays a standard curve for the Human IL-10 Sandwich ELISA Assay. The x-axis represents Human IL-10 concentration in pg/mL, ranging from 10 to 10,000 on a logarithmic scale. The y-axis represents Optical Density, ranging from 0.01 to 10 on a logarithmic scale. The data points show a clear positive correlation, indicating that as the concentration of Human IL-10 increases, the optical density also increases proportionally.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human IL-10 concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>0.05</td> </tr> <tr> <td>50</td> <td>0.1</td> </tr> <tr> <td>100</td> <td>0.2</td> </tr> <tr> <td>200</td> <td>0.4</td> </tr> <tr> <td>500</td> <td>0.8</td> </tr> <tr> <td>1000</td> <td>1.5</td> </tr> <tr> <td>2000</td> <td>3.0</td> </tr> </tbody> </table>	Human IL-10 concentration (pg/mL)	Optical Density	20	0.05	50	0.1	100	0.2	200	0.4	500	0.8	1000	1.5	2000	3.0
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ELISA Detection	1:1000-1:10000	Human IL-10 Detection Antibody (Biotin)																	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

Interleukin (IL)-10 is an anti-inflammatory cytokine, produced by T helper (Th) cells, macrophages, monocytes, and B cells, that plays a crucial role in preventing inflammatory and autoimmune pathologies. It downregulates the expression of Th1 cytokines, MHC class II antigens, and co-stimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. IL-10 can block NF-κB activity, and is involved in the regulation of the JAK-STAT signaling pathway. IL-10, along with its receptors, describes an important role in pathogenesis of various diseases, including infectious, inflammatory, autoimmune diseases. IL-10 mutations are associated with an increased susceptibility to HIV-1 infection and rheumatoid arthritis.