

Rat IL-10 Antibody Pair Set

Catalog No. E-KAB-0102

Applications

ELISA

Synonyms IL10, IL10A, CSIF, TGIF

Kit components & Storage

Title	Specifications	Storage
Rat IL-10 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Rat 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.

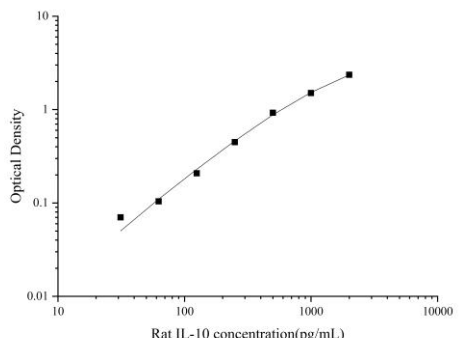
Product Information

Items		Characteristic (E-KAB-0102)	
		Rat IL-10 Capture Antibody	Rat IL-10 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat IL-10 protein	Recombinant Rat IL-10 protein
	Swissprot	P29456	
Product details	Reactivity	Rat	Rat
	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 Rat IL-10 in ELISAs.		

For Research Use Only

Applications

Rat IL-10 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Rat IL-10 Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Rat IL-10 concentration (pg/mL). The x-axis ranges from 10 to 10000 pg/mL, and the y-axis ranges from 0.01 to 10. The data points form a straight line, indicating a linear relationship between the log of concentration and the log of optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Rat 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>2.5</td> </tr> </tbody> </table>	Rat 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	2.5
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ELISA Detection	1:1000-1:10000	Rat 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.