

Human IL-4 Antibody Pair Set

Catalog No.	E-KAB-0402	Applications	ELISA
Synonyms	IL4;BCGF-1;BCGF1;BSF-1;BSF1		

Kit components & Storage

Title	Specifications	Storage
Human IL-4 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze/thaw cycles.
Human IL-4 Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze/thaw cycles.

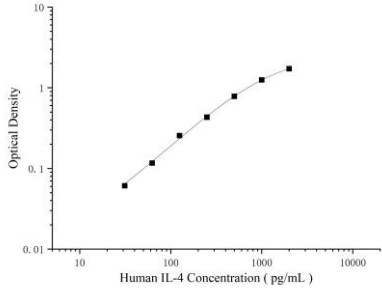
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0402)	
		Human IL-4 Capture Antibody	Human IL-4 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human IL-4 protien	Recombinant Human IL-4 protien
	Swissprot	P05112	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	Conjugation	Unconjugated	Biotin
	Concentration	0.5 mg/mL	/
	Buffer	PBS with 0.04% Proclin 300; 50% glycerol; pH 7.5	PBS with 0.04% Proclin 300; 1% protective protein; 50% glycerol; pH 7.5
	Purify	Protein A or G	Protein A or G
	Specificity	Detects Human IL-4 in ELISAs.	

Applications

Human IL-4 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images										
ELISA Capture	0.5-4 µg/mL	Human IL-4 Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Human IL-4 Concentration (pg/mL). The x-axis ranges from 10 to 10,000 pg/mL, and the y-axis ranges from 0.01 to 10. The data points form a smooth, upward-sloping curve, indicating a positive correlation between concentration and optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human IL-4 Concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr><td>10</td><td>0.05</td></tr> <tr><td>100</td><td>0.2</td></tr> <tr><td>1000</td><td>0.8</td></tr> <tr><td>10000</td><td>3.0</td></tr> </tbody> </table>	Human IL-4 Concentration (pg/mL)	Optical Density	10	0.05	100	0.2	1000	0.8	10000	3.0
Human IL-4 Concentration (pg/mL)	Optical Density												
10	0.05												
100	0.2												
1000	0.8												
10000	3.0												
ELISA Detection	1:1000-1:10000	Human IL-4 Detection Antibody (Biotin)											

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

Background

The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.