

Human IL-22 Antibody Pair Set

Catalog No.	E-KAB-0214	Applications	ELISA
Synonyms	IL22, IL-D110, IL-TIF, ILTIF, TIFIL-23, TIFa, zcyto18		

Kit components & Storage

Title	Specifications	Storage
Human IL-22 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Human IL-22 Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

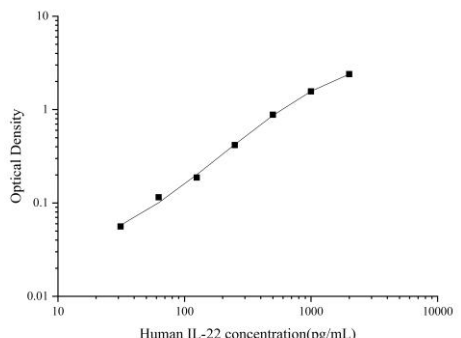
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0214)	
		Human IL-22 Capture Antibody	Human IL-22 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human IL-22 protein	Recombinant Human IL-22 protein
	Swissprot	Q9GZX6	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	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	Protein A
	Specificity	Detects Human IL-22 in ELISAs.	

Applications

Human IL-22 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images										
ELISA Capture	0.5-4µg/mL	Human IL-22 Capture Antibody	 <p>The graph displays a standard curve for the Human IL-22 Sandwich ELISA Assay. The x-axis represents Human IL-22 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-22 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-22 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-22 concentration (pg/mL)	Optical Density	10	0.05	100	0.2	1000	0.8	10000	3.0
Human IL-22 concentration (pg/mL)	Optical Density												
10	0.05												
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1000	0.8												
10000	3.0												
ELISA Detection	1:1000-1:10000	Human IL-22 Detection Antibody (Biotin)											

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

Background

Interleukin-22 (IL-22), also known as IL-10-related T cell-derived inducible factor (IL-TIF) was initially identified as a gene induced by IL-9 in mouse T cells and mast cells. Mouse IL-22 cDNA encodes a 179 amino acid (aa) residue protein with a putative 33 aa signal peptide that is cleaved to generate a 147 aa mature protein that shares approximately 79% and 22% aa sequence identity with human IL-22 and IL-10, respectively. The mouse IL-22 gene is localized to chromosome 10. Although it exists as a single copy gene in many mouse strains, the IL-22 gene is duplicated in some mouse strains including C57B1/6, FVB and 129. The two mouse genes designated IL-TIF alpha and IL-TIF beta, share greater than 98% sequence homology in their coding region. IL-22 has been shown to activate STAT1 and STAT3 in several hepatoma cell lines and upregulate the production of acute phase proteins. IL-22 is produced by normal mouse T cells upon Con A activation. Mouse IL-22 expression is also induced in various organs upon lipopolysaccharide injection, suggesting that IL-22 may be involved in inflammatory responses. The functional IL-22 receptor complex consists of two receptor subunits, IL-22 R (previously an orphan receptor named CRF2-9) and IL-10 R beta (previously known as CRF2-4), belonging to the class II cytokine receptor family.