

Catalog Number: HZ-1004

Data Sheet

HumanKine® IL-4 (Recombinant Human)

Animal Component-Free	Human cell expressed	Tag-Free	Endotoxin Free	

Product Description		
Animal-free Recombinant Human IL-4 also known as B cell-stimulatory factor-1. IL-4 is a monomeric, approximately 13 kDa and 19 kDa Th2 cytokine which shows pleiotropic effects during immune responses. Our IL-4 is produced in a human cell expression system with serum-free and chemically defined media. It has demonstrated greater stability under cell culture conditions making it ideal for efficient generation of Human Dendritic Cells.		
Alternative Names	B cell stimulatory factor 1, Binetrakin, BSF 1, BSF1, IL 4, IL4, IL-4, interleukin 4, Pitrakinra	
Source Human Embryonic Kidney cells (HEK293). HEK293-derived IL-4 protein		

Specifications			
Test	Method	Specification	
Activity	Dose-dependent stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line)	0.07-0.4 ng/mL	
Molecular Mass	SDS-PAGE	15 and 21 kDa reduced, 13 and 19 kDa non-reduced, monomer, glycosylated	
Purity	SDS-PAGE	>95%	
Endotoxin	LAL	<1 EU/µg	

Activity Data		SDS-PAGE	
Recombinant IL-4 2.4 2.2 2.0 1.8 1.6 0.0001 0.01 0.1 1. 10. 100. Concentration (ng/mL)	Recombinant human IL-4 (HZ-1004) stimulates dose- dependent proliferation of the TF-1 human erythroleukemic indicator cell line. Cell number was quantitatively assessed by PrestoBlue® cell viability reagent. TF-1 cells were treated with increasing concentrations of recombinant IL-4 for 72 hours. The EC50 was determined using a 4- parameter non-linear	kDa Reducing Non-Reducing 235 170- 130- 130- 33 70- 53- 42- 30- 30- 23- 18- 14- 10- 10-	

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	Preparation		
Shipping Temperature	ambient temperature		
Formulation	1x PBS, See Certificate of Analysis for details		
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4 containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix.		

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
		Avoid repeated freeze-thaw cycles.	

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