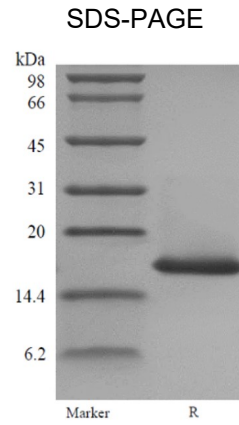


IL18

Recombinant Human Interleukin-18 GMP

Catalog No.	CRI166A-GMP CRI166B-GMP	Quantity:	5 µg 100 µg
Alternate Names:	Interleukin-18, IL-18, Interferon gamma-inducing factor, IGIF, Interleukin-1 gamma		
Description:	Human Interleukin-18 is a proinflammatory cytokine in the IL-1 family that exerts distinct immune effects depending on the local cytokine environment. It is expressed as a 24 kDa precursor by endothelial and epithelial cells, keratinocytes, gamma δ T cells, and phagocytes. The precursor is activated intracellularly by Caspase-1 mediated proteolysis to release the 17 kDa mature cytokine. The precursor can also be released by necrotic cells for extracellular cleavage by multiple proteases. IL-18 activation is induced by infection or tissue damage and contributes to disease pathology in chronic inflammation. IL-18 binds to the widely expressed IL-18 R alpha which recruits IL-18 R beta to form the signaling receptor complex. Its bioactivity is negatively regulated by interactions with IL-18 binding proteins and virally encoded IL-18BP homologs.		
	The manufacturing and testing of Recombinant Human Interleukin-18 GMP complies with ICH Q7 guidelines.		
UniProt ID:	Q14116		
Source:	<i>E. coli</i>		
Molecular Weight:	18.2 kDa (157 aa) monomer		
Formulation:	Lyophilized from sterile filtered PBS, 0.05% Tween-20, pH 7.0		
Purity:	> 95% by SDS-PAGE > 98% by HPLC		
Endotoxin Level:	< 0.01 EU/µg as determined by LAL method.		
Biological Activity:	ED ₅₀ = 1.5-15 ng/ml, determined by the ability to induce IFN-gamma secretion by KG-1 human acute myelogenous leukemia cells		
Specific Activity:	> 3.0 x 10 ⁶ Units/mg, calibrated against the rhIL-18 WHO reference standard (NIBSC code: 03/200)		
Amino Acid Sequence:	YFGKLESKLS VIRNLNDQVL FIDQGNRPLF EDMTSDSCRD NAPRTIFIIS MYKDSQPRGM AVTISVKCEK ISTLSCENKI ISFKEMNPPD NIKDTKSDII FFQRSVPGHD NKMQFESSY EGYFLACEKE RDLFKLILKK EDELGDRSIM FTVQNE		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-0.3 mg/ml. Further dilution should be made in appropriate buffered solutions.		
Storage & Stability:	Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, store at 2-8°C for up to 1 month or prepare working aliquots and store at -20°C to -80°C for up to 3 months. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage. Avoid repeated freeze-thaw cycles.		





NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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