Recombinant Mouse Interleukin-18/IL-18 Protein (His Tag)

Catalog Number: PKSM041079



Description	
Species	Mouse
Mol_Mass	19.1 kDa
Accession	P70380
Bio-activity	Measure by its ability to induce IFN gamma secretion in KG-1 cells. The ED_{50} for this
	effect is $<0.5 \ \mu g/mL$.
Properties	
Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}C$ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	
kDa	
75- 63-	
48-	
35-	
25-	

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

> 98 % as determined by reducing SDS-PAGE.

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Background

Interleukin-18 (IL-18) is a protein which belongs to the IL-1 family. It is expressed as a 24 kDa precursor by endothelial and epithelial cells, keratinocytes, gamma & T cells, and phagocytes. Mature mouse IL-18 shares 63% and 91% amino acid sequence identity with mouse and rat IL-18, respectively. 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 I L-18 binding proteins and virally encoded IL-18BP homologs. It augments natural killer cell activity in spleen cells and stimulates interferon gamma production in T-helper type I cells. In the presence of IL-12 or IL-15, IL-18 enhances antiviral Th1 immune responses by inducing IFN-gamma production and the cytolytic activity of CD8+ T cells and NK cells. In the absence of IL-12 or IL-15, however, IL-18 promotes production of the Th2 cytokines IL-4 and IL-13 by CD4+ T cells and basophils.

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