

Recombinant Mouse IL-18 (N-6His)

Catalog No.: RP0062

Basic Information

Information

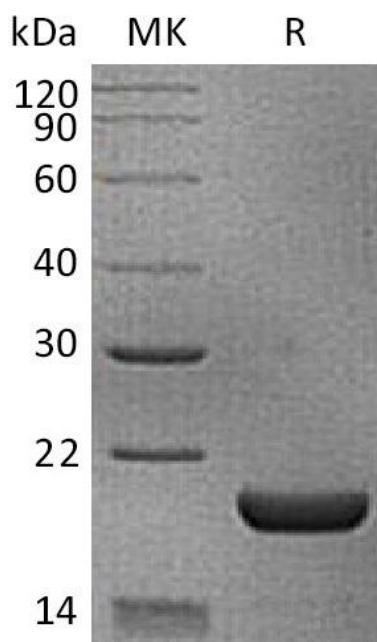
Source	<i>E.coli</i>
Description	Recombinant Mouse Interleukin-18 is produced by our E.coli expression system and the target gene encoding Asn36-Ser192 is expressed with a 6His tag at the N-terminus.
Accession	P70380
Known As	Interleukin-18; Il18; Interferon gamma-inducing factor; IFN-gamma-inducing factor; Interleukin-1 gamma; IL-1 gamma; Igif
Predicted Mol Mass	19.7 KDa
Apparent Mol Mass	20 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 10% Trehalose, 50mM NaCl, 0.1mM EDTA, 0.05% Tween 80, pH 8.0.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 1 EU/µg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

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 δ 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 IL-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 anti-viral 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.