Recombinant Human IL-1b

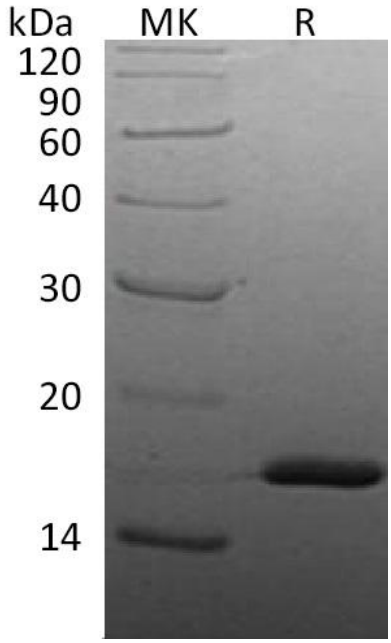
Catalog No.: RP0019

Basic Information

Information	
Source	*E.coli*
Description	Recombinant Human Interleukin-1 Beta is produced by our E.coli expression system and the target gene encoding Ala117-Ser269 is expressed.
Accession	P01584
Known As	Interleukin-1 beta; Catabolin; IL1F2; IL1B
Predicted Mol Mass	17.5 KDa
Apparent Mol Mass	17 KDa, reducing conditions
Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB， 150 mM NaCl， 3% Trehalose，0.02% Tween 80，4% Mannitol，pH 7.4.
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	< 0.01 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.

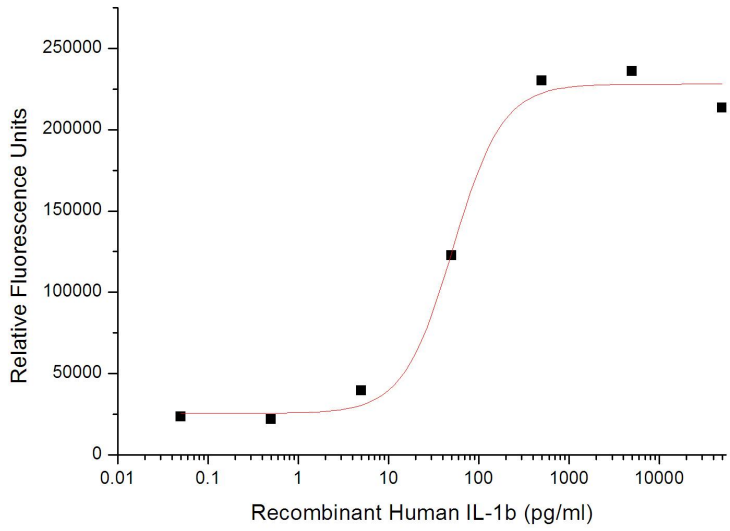
Experimental Data

Purity-SDS-PAGE



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

Bioactivity-Cell Based Assay



Measured by its ability to induce NF-kB signaling in 293-IL1 Res cells. The ED50 for this effect is 20-100 pg/ml.

Background

IL1B belongs to the IL-1 family. Interleukin 1 (IL-1) is a family of polypeptide cytokines consisting of two agonists, IL-1 alpha (IL-1F1) and IL-1 beta (IL-1F2) encoded by two distinct genes and perform identical biological functions. IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response. It is identified as endogenous pyrogens, and is reported to stimulate the release of prostaglandin and collagenase from synovial cells.