

Rev03
Update: Dec,14,2021

DATASHEET

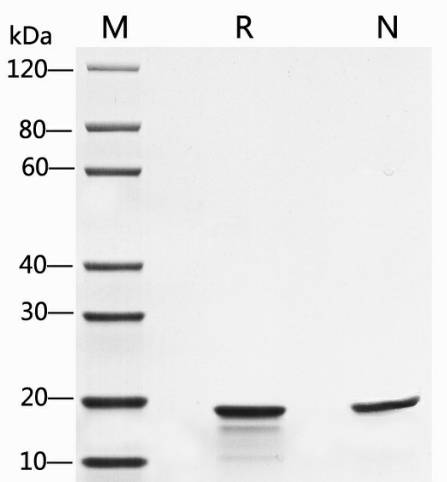
IL-1 β , Mouse

Cat. No.: Z02985

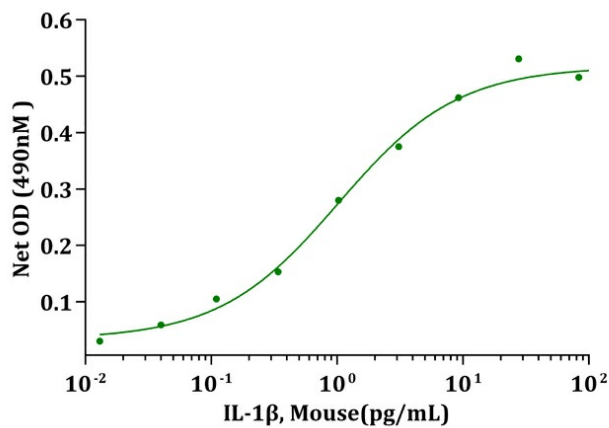
Product Introduction

Species	Mouse
Protein Construction	Expressed with an N-terminal Met. IL-1β (Val118-Ser269) Accession # P10749
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/ μ g of protein by gel clotting method
Biological Activity	ED ₅₀ < 10.0 pg/ml, measured by the dose-dependent stimulation of mouse D10.G4.1 helper T cells, corresponding to a specific activity of 1.0×10^8 IU/mg.
Expression System	E. coli
Apparent Molecular Weight	~17.5 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples



2 μg of IL-1 β , Mouse (Cat. No. Z02985) was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



Biological Activity

IL-1beta, Mouse (Cat. No. Z02985) stimulates cell proliferation of D10S cells. The ED₅₀ for this effect is less than 2pg/mL.

Background

Target Background : Interleukin-1 Beta (IL-1 β) is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1 alpha and IL-1 beta binds to the same receptor and has similar if not identical biological properties. These cytokines have a broad range of activities including, stimulation of thymocyte proliferation, by inducing IL-2 release, B-cell maturation and proliferation, mitogenic FGF-like activity and the ability to stimulate the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1 beta is a secreted cytokine, IL-1 alpha is predominantly a cell-associated cytokine.

Synonyms : IL1B; IL-1; IL1-BETA; IL1F2; interleukin 1 beta; IL1beta

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.