

Validation data for recombinant human IL-1 β (CHO)

Mammalian cell-expressed human interleukin 1 beta (IL-1 β)

<https://www.invivogen.com/human-il1b>

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Version 24A18-AK

Interleukin 1 beta (IL-1 β) is a soluble pro-inflammatory cytokine that plays a critical role in the host response to infection and injury. InvivoGen offers a recombinant human IL-1 β , produced in mammalian Chinese hamster ovary (CHO) cells. The size and purity of hIL-1 β was assessed using SDS PAGE (Figure 1). Its predicted size is ~17 kDa (lower band). The higher band at ~19 kDa corresponds to the glycosylated protein. The biological activity of IL-1 β has been confirmed using InvivoGen's HEK-Blue™ IL-1 β cells (Figure 2). Binding of IL-1 β to its receptor on the surface of HEK-Blue™ IL-1 β cells triggers a signaling cascade leading to the activation NF- κ B and the subsequent production of SEAP. Levels of SEAP can be easily measured using QUANTI-Blue™, a detection reagent.

Detection by SDS-PAGE

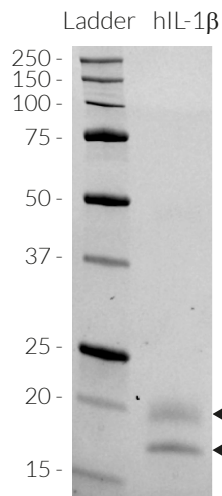


Figure 1. SDS PAGE of the recombinant human (h)IL-1 β protein. 3 μ g of hIL-1 β was loaded on a 12% Mini-PROTEAN® TGX Stain-Free™ Precast Gel (Bio-Rad). Detection was performed as per the manufacturer's instructions.

Dose-response in HEK cells to human IL-1 β

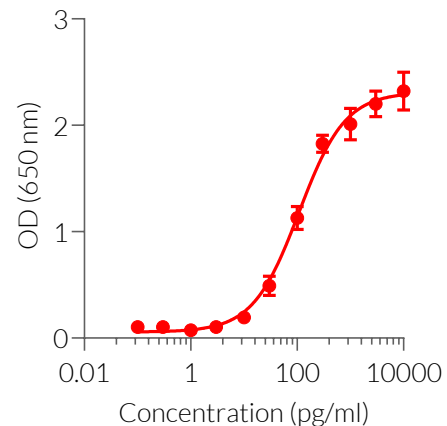


Figure 2. Dose-response in HEK-Blue™ IL-1 β cells to recombinant IL-1 β cytokine. Cells were stimulated with increasing concentrations of recombinant human IL-1 β . After overnight incubation, the NF- κ B-induced SEAP activity was determined using QUANTI-Blue™, a SEAP detection reagent. Data are shown as optical density (OD) at 650 nm (mean \pm SEM).

TECHNICAL SUPPORT

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