

**Animal-Free Recombinant Human IL-1 $\beta$**   
**Catalog # PBG10509****Specification**

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**Animal-Free Recombinant Human IL-1 $\beta$  - Product Information****Animal-Free Recombinant Human IL-1 $\beta$  - Additional Information****Description**

IL-1 $\beta$  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. Recombinant human IL-1 $\beta$  is a 17.3 kDa protein containing 153 amino acid residues.

**Biological Activity**

The  $ED_{50}$  as determined by the dose-dependent stimulation of thymidine uptake by murine D10S cells is  $\leq 1.0$  pg/ml, corresponding to a specific activity of  $\geq 1 \times 10^9$  units/mg.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $<0.1$  ng/  $\mu$ g of protein ( $<1$ EU/  $\mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Animal-Free Recombinant Human IL-1 $\beta$  is for research use only and not for use in diagnostic or therapeutic procedures.

**Animal-Free Recombinant Human IL-1 $\beta$  - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Animal-Free Recombinant Human IL-1 $\beta$ - Images**