IL-1 beta
Interleukin 1 beta
murine, recombinant, E. coli

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amount</th>
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<td>PR-459</td>
<td>10 µg</td>
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For in vitro use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form
Lyophilized.

Solubility
It is recommended to reconstitute the lyophilized IL-1 β in sterile bidest H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Activity
ED₅₀: < 0.002 ng/ml, corresponding to a specific activity of 5 x 10⁸ IU/mg, determined by the dose-dependent stimulation of murine D10S cells.

Molecular Weight
17.5 kDa

Purity
≥ 95% by SDS-PAGE and RP-HPLC

Description
Interleukin-1 beta produced in E.coli is a non-glycosylated polypeptide chain containing 153 amino acids.
Interleukin 1 β (IL-1 β) is a soluble factor produced by monocytes, macrophages, and other cells which activates T-lymphocytes and potentiates their response to mitogens or antigens. Murine macrophages display a transition from IL-1 β to IL-1 α production during maturation of monocytes into inflammatory macrophages.
The synthesis of IL-1 can be induced by other cytokines including TNF-α, IFN-α, IFN-β and IFN-γ and also by bacterial endotoxins, viruses, mitogens, and antigens. In human skin fibroblasts IL-1α and TNF-α induce the synthesis of IL-1 β. In pheochromocytoma cells, NGF induces the synthesis of IL-1.
IL-1 β is purified by proprietary chromatographic techniques.

Selected References: