Recombinant Mouse IL-1β

**Product Information**

Material Number: 554577

Size: 5 µg

Reactivity: QC Testing: Mouse

Storage Buffer: Lyophilized in an aqueous buffered solution containing BSA.

**Description**

Interleukin-1 (IL-1β) is a potent immunomodulator which mediates a wide range of immune and inflammatory responses including the activation of B and T cells. Mouse IL-1 is a 17 kDa protein containing 153 amino acid residues.

**Formulation and Purity:** Recombinant mouse IL-1β is supplied lyophilized from a solution comprised of 0.22 µm sterile-filtered aqueous buffered solution, pH 7.4, and containing 50 µg bovine serum albumin, per µg of cytokine. The product contains no preservatives.

Recombinant mouse IL-1β is > 95% pure as determined by SDS-PAGE analysis, and an absorbance assay based on the Beers-Lambert law.

**Preparation and Storage**

Store product at -80°C prior to use or for long term storage of stock solutions.

Avoid multiple freeze-thaws of product.

The product can be reconstituted in sterile neutral buffer containing not less than 0.5 - 10 mg/ml carrier protein such as human or bovine albumin, aliquoted and stored at -80°C. For in vitro biological assay use, we recommend carrier-protein concentrations of 0.5 - 1.0 mg/ml. For use as an ELISA standard we recommend carrier-protein concentrations of 5-10 mg/ml. Failure to add carrier protein or store at indicated temperatures may result in a loss of activity.

**Application Notes**

**Application**

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<th>ELISA Standard</th>
<th>Routinely Tested</th>
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<tr>
<td>Bioassay</td>
<td>Tested During Development</td>
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**Recommended Assay Procedure:**

1. **Biological Activity:** As measured by proliferation of TF-1 indicator cells at 10^5 cells/ml

2. **ELISA Standard:**

Recombinant mouse IL-1β is useful as a quantitative standard for measuring mouse IL-1β protein levels in an IL-1β-specific sandwich ELISA. For specific methodology, please visit the online protocols under "ELISA and ELISPOT" at our website, http://www.bdbiosciences.com/us/s/resources. To measure mouse IL-1β in plasma or serum, we recommend the BD OptEIA™ Mouse IL-1β ELISA Set (Cat. No. 559603), which is specially formulated for assay of cytokine in complex fluids.

**Suggested Companion Products**

<table>
<thead>
<tr>
<th>Catalog Number</th>
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<tbody>
<tr>
<td>559603</td>
<td>Mouse IL-1β ELISA Set</td>
<td>20 Plate(s)</td>
<td>(none)</td>
</tr>
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</table>

**Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

**References**


Kitamura T, Takaku F, Miyajima A. IL-1 up-regulates the expression of cytokine receptors on a factor-dependent human hemopoietic cell line, TF-1. *Int Immunol.* 1991; 3(8):571-577. (Biology)


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United States Canada Europe Japan Asia Pacific Latin America/Caribbean
877.232.8995 866.979.9408 32.2.400.98.95 0120.8555.90 65.6861.0633 55.11.5185.9995

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