Product Information

Interleukin-1β (IL-1β)
Rat, Recombinant
Expressed in E. coli

Product Number I 2393

Product Description
Interleukin-1 (IL-1), originally known as Lymphocyte Activating Factor (LAF), activates T cells and lymphocytes, which then proliferate and secrete interleukin-2.1 IL-1 is primarily released from stimulated macrophages and monocytes, but is also released from several other cell types,2 and is thought to play a key role in inflammatory and immune responses.3 Other synonyms for IL-1 include: Endogenous Pyrogen (EP), Mitogenic Protein (MP), Helper Peak-1 (HP-1), T Cell Replacing Factor III (TRF III or TRFIII), B Cell Activating Factor (BAF) and B Cell Differentiation Factor (BDF).4 The two closely related agents, Interleukin-1α (IL-1α) and Interleukin-1β (IL-1β) bind to the same cell surface receptor, elicit nearly identical biological responses and yet share 25% homology in their amino acid sequence. Recombinant rat IL-1β is a 17.3 kDa protein containing 153 amino acid residues.

Reagent
Lyophilized from a 0.2 µm-filtered buffered solution.

Storage/Stability
The lyophilized protein is best stored at –20 °C. It is stable for up to a few weeks at room temperature. Reconstituted product should be stored in working aliquots at –20 °C. Repeated freezing and thawing is not recommended. Do not store in frost-free freezer.

Reconstitution
Reconstitute the contents of the vial with water to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 2-8 °C for up to one week. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing is not recommended.

Product Profile
The biological activity of recombinant rat IL-1β was measured in a cell proliferation assay using murine D10S cells.5 The ED50 is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

Purity: ≥ 98% as determined by SDS-PAGE and HPLC.

Endotoxin: < 0.1 ng/µg cytokine.

References

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