

Recombinant Rat Interleukin-1 β (IL-1 β)

CATALOG #:	4130-10	10 μ g
	4130-50	50 μ g
	4130-1000	1 mg
LOT #:		
SOURCE:	<i>E. coli</i>	
PURITY:	> 98% by SDS-PAGE and HPLC analysis Endotoxin level is <0.01 ng per μ g of rat IL-1 β .	
MOL. WEIGHT:	17.3 kDa	
FORMULATION:	Sterile filtered and then lyophilized from 10 mM Sodium phosphate buffer, pH 7.5	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1mg/ml. The reconstituted material should be aliquoted and frozen at -20°C for future use. It is recommended that a carrier protein (0.1 % HSA or BSA) be added for long term storage.

STORAGE CONDITIONS:

The lyophilized IL-1 β should be stored desiccated below 0°C. Reconstituted rat IL-1 β should be stored at working aliquots at -20°C.

DESCRIPTION:

IL-1 β is a pro-inflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1 α and IL-1 β binds to the same receptor and has similar biological properties. These cytokines have a broad range of activities including, stimulation of thymocyte proliferation, B-cell maturation and proliferation, mitogenic FGF-like activity and stimulation of the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1 β is a secreted cytokine, IL-1 α is predominantly a cell-associated cytokine. Recombinant rat IL-1 β is a 17.4 kDa protein containing 153 amino acid residues.

BIOLOGICAL ACTIVITY:

The ED₅₀ as determined by the dose-dependent stimulation of murine D10S cells is \leq 1 ng/ml.

AA Sequence:

VPIRQLHCLRLDEQQKCLVLSDPCELKALHLNGQNISQQVVFMSFVQGETSNDKIPVALGLK
GLNLYLSCVMKDGTPTLQLESVDPKQYPKKMEKRFVFNKIEVKTKVEFESAQFPNWIYST
QARPVFLGNSNGRDIVDFTEPVSS

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