

## Recombinant Rhesus Macaque Interleukin-1 beta (Rhesus Macaque IL-1 $\beta$ )

### Product Information

Product Name	Cat#	Size
	90132ES10	10 $\mu$ g
Recombinant Rhesus Macaque Interleukin-1 beta (Rhesus Macaque IL-1 $\beta$ )	90132ES60	100 $\mu$ g
	90132ES76	500 $\mu$ g

### Product Description

Interleukin-1 beta (IL-1 $\beta$ ) is a pro inflammatory cytokine, which is secreted by immune cells to trigger inflammation and this has been found profoundly in the lesions caused by Leishmania pathogens. IL-1 is a name that designates two pleiotropic cytokines, IL-1 alpha (IL-1F1) and IL-1 beta (IL-1F2), which are the products of distinct genes. IL-1 alpha and IL-1 beta are structurally related polypeptides that share approximately 21% amino acid (aa) identity in human. Both IL-1 $\alpha$  and IL-1 $\beta$  binds to the same receptor and has similar but not identical biological properties; The 17 kDa mature rhesus IL-1 beta shares 96% aa sequence identity with human and 67% - 78% with canine, cotton rat, equine, feline, mouse, porcine, and rat IL-1 beta, are known to modulate effects of neurotoxic neurotransmitters discharged during excitation or inflammation in the central nervous system (CNS).

### Product Properties

<b>Synonyms</b>	Catabolin, Leukocyte Endogenous Mediator, LEM, Lymphocyte-activating factor , LAF, Mononuclear Cell Factor, MCF , Endogenous Pyrogen, EP
<b>Accession</b>	P48090
<b>GeneID</b>	704701
<b>Source</b>	E.coli-derived Rhesus Macaque IL-1 $\beta$ , Ala117-Ser269.
<b>Molecular Weight</b>	Approximately 17.3 kDa.
<b>AA Sequence</b>	APVRSLSHCTL RDAQLKSLVM SGPYELKALH LQGQDLEQQV VFSMSFVQGE ESNDKIPVAL GLKAKNLYLS CVLKDDKPTL QLESVDPKNY PKKKMEKRFBV FNKIEINNKL EFESAQFPNW YISTSQAENM PVFLGGTRGG QDITDFTMQF VSS
<b>Tag</b>	None
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	> 98% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by a cell proliferation assay using murine D10.G4.1 cells is less than 10 pg/mL, corresponding to a specific activity of > 1.0 $\times$ 10 <sup>8</sup> IU/mg. Fully biologically active when compared to standard.
<b>Endotoxin</b>	< 1.0 EU per 1 $\mu$ g of the protein by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
<b>Reconstitution</b>	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20°C. Further dilutions should be made in appropriate buffered solutions.

### Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

### **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!