

## Product Datasheet

# Recombinant Murine Interleukin-1 beta (rMuIL-1 $\beta$ ) (orb1495012)

<b>Description</b>	IL-1 $\beta$ is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1 $\alpha$ and IL-1 $\beta$ binds to the same receptor and has similar if not identical biological properties. These cytokines have a broad range of activities including, stimulation of thymocyte proliferation, by inducing IL-2 release, B-cell maturation and proliferation, mitogenic FGF-like activity and the ability to stimulate the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1 $\beta$ is a secreted cytokine, IL-1 $\alpha$ is predominantly a cell-associated cytokine.
<b>Endotoxins</b>	Less than 1EU/mg of rmlIL-1 $\beta$ as determined by LAL method.
<b>Preservatives</b>	Lyophilized from a 0.2mm filtered solution in PBS, pH 7.4.
<b>Form/Appearance</b>	Lyophilized from a 0.2mm filtered solution in PBS, pH 7.4.
<b>Storage</b>	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
<b>Note</b>	For research use only
<b>Application notes</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. 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 -20°C. Further dilutions should be made in appropriate buffered solutions.
<b>Protein Sequence</b>	MVPIRQLHYR LRDEQQKSLV LSDPYELKAL HLNGQNINQQ VIFSMSFVQG EPSNDKIPVA LGLKGKNLYL SCVMKDGTP T LQLESVDPKQ YPKKKMEKRF VFNKIEVKSK VEFESAEFPN WYISTSQAEH KPVFLGNNSG QDIIDFTMES VSS
<b>Purity</b>	> 98% by SDS-PAGE and HPLC analyses.

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Source	Escherichia coli.
MW	Approximately 17.5kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Expiration Date	6 months from date of receipt.

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