

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	111-01B
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Quantity:	2 μ g/10 μ g/1000 μ g
AA Sequence:	APVRS LHCTL RDAQLKSLVM SGPYELKALH LQGQDLEQQV VFSMSFVQGE ESNDKIPVAL GLKAKNLYLS CVLKDDKPTL QLESVDPKNY P KKKMEKRFV FNKIEINNKL EFESAQFPNW YISTSQAENM PVFLGGTRGG QDITDFTMQF VSS
Purity:	> 98 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ 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 $\times 10^8$ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1 EU/ μ g of rRhIL-1 β as determined by LAL method.
Reconstitution:	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 $^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 $^{\circ}\text{C}$ as supplied.● 1 month, 2 to 8 $^{\circ}\text{C}$ under sterile conditions after reconstitution.● 3 months, -20 to -70 $^{\circ}\text{C}$ under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Rhesus macaque Interleukin-1 beta

Interleukin-1beta (IL-1 β) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1 α and IL-1 β binds to the same receptor and has similar but 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. The mature Rhesus macaque IL1 β shares 96 % amino acid sequence identity with rhesus and 67 % - 78 % with canine, mouse and rat IL1 β .