

Recombinant Equine Interleukin-1 beta (rEqIL-1β)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

1F1-01B

Source:

Escherichia coli.

Molecular Weight:

Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.

Quantity:

 $2\mu g/10\mu g/1000\mu g$

AA Sequence:

AAMHSVNCRL RDIYHKSLVL SGACELQAVH LNGENTNQQV VFCMSFVQGE

EETDKIPVAL GLKEKNLYLS CGMKDGKPTL QLETVDPNTY PKRKMEKRFV FNKMEIKGNV EFESAMYPNW YISTSQAEKS PVFLGNTRGG RDITDFIMEI TSA

Purity:

> 95 % 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 D10S cells is less than 20 pg/ml, corresponding to a specific activity of $> 5.0 \times 10^{-5}$

 10^7 IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in 1 × PBS, pH 7.4, 0.1 % Tween-80.

Endotoxin:

Less than 1 EU/μg of rEqIL-1β 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 \leq -20 °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.

12 months from date of receipt, -20 to -70 °C as supplied.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 to -70 °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.

Equine Interleukin-1 beta

Interleukin-1 beta (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. Recombinant equine interleukin-1 beta is a 17 kDa protein containing 153 amino acid residues and it shares 63 %~70 % a.a. sequence identity with canine, cotton rat, porcine, feline, human, mouse, rat, and rhesus IL1 β .

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