

## Recombinant Rat Interleukin-3 beta (rRtIL-3\beta)

## PrimeGene Technical Data Sheet

Catalog Number: 141-03B

Source: Escherichia coli.

**Molecular Weight:** Approximately 16.3 kDa, a single non-glycosylated polypeptide chain containing 144 amino acids.

**Quantity:**  $5\mu g/20\mu g/1000\mu g$ 

**AA Sequence:** MISDRGSDAH HLLRTLDCRT IALEILVKLP YPQVSGLNNS DDKANLRNST LRRVNLDEFL

KSQEEFDSQD TTDIKSKLQK LKCCIPAAAS DSVLPGVYNK DLDDFKKKLR FYVIHLKDLQ

PVSVSRPPQP TSSSDNFRPM TVEC

**Purity:** > 95 % by SDS-PAGE and HPLC analyses.

**Biological Activity:** Fully biologically active when compared to standard. The ED<sub>50</sub> as determined by a cell proliferation

assay using murine MC-9 cells is less than 10 ng/ml, corresponding to a specific activity of  $> 1.0 \times$ 

 $10^5$  IU/mg.

Sterile Filtered White lyophilized (freeze-dried) powder. Physical Appearance:

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Endotoxin:** Less than 1 EU/ $\mu$ g of rRtIL-3 $\beta$  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: This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further

evaluation purposes. NOT FOR HUMAN USE.

## Rat Interleukin-3 beta

Interleukin-3 (IL-3) is a type of biological signal (cytokine) which is encoded by the IL-3 gene located on chromosome 5 and produced primarily by activated T cells beside human thymic epithelial cells, activated murine mast cells, murine keratinocytes and neurons/astrocytes. It exerts its biological activities through binding to Interleukin-3 receptors included  $\alpha$  and  $\beta$  subunits, but sequence analysis revealed a number of features indicative of the presence of only one β-subunit in the rat. Interleukin-3 acts in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. Furthermore, rat and human IL-3 share low homology and have not cross species activity.

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