

## **Product Datasheet**

## RecombinantIL-3β,Rat (orb1494818)

**Description** 

Interleukin-3 (IL-3) is a pleiotropic cytokine belonging to the interleukin family. IL-3 shares similarities with Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) and IL-5: they all have a four-helix bundle structure, are located on the same chromosomes in both human and mouse, are produced by activated T cells, and share receptors. The IL-3/IL-5/GM-CSF receptor family members are all heterodimeric, composed of a receptor-specific  $\alpha$  chain and a common  $\beta$  chain. IL-3 is also called multi-colony stimulating factor since it stimulates the development and colony formation of multiple lineages of hematopoietic cells by activating intracellular pathways such as Ras-Raf-ERK and JAK/STAT. IL-3 inhibits apoptosis and promotes cell survival by targeting the anti-apoptotic bcl-2 gene family. Recombinant rat Interleukin-3 beta (rrIL-3 beta) produced in E.coli is a single non-glycosylated polypeptide chain containing of 144 amino acids. A fully biologically active molecule, rrIL-3 beta has a molecular mass of 16.3 kDa analyzed by non-reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

**Endotoxins** < 0.2 EU/μg, determined by LAL method.

**Preservatives** Lyophilized after extensive dialysis against PBS.

**Form/Appearance** Lyophilized after extensive dialysis against PBS.

**Storage** Lyophilized recombinant rat Interleukin-3 beta (rrIL-3 beta) remains stable up to

6 months at -80°C from date of receipt. Upon reconstitution, rrIL-3 beta remains

stable up to 2 weeks at 4°C or up to 3 months at -20°C.

**Note** For research use only

**Application notes** Reconstituted in ddH2O at 100 μg/mL.

Protein Sequence MISDRGSDA HHLLRTLDCR TIALEILVKL PYPQVSGLNN SDDKANLRNS TLRRVNLDEF

LKSQEEFDSQ DTTDIKSKLQ KLKCCIPAAA SDSVLPGVYN KDLDDFKKKL RFYVIHLKDL

QPVSVSRPPQ PTSSSDNFRP MTVEC

**Purity** > 95% as analyzed by SDS-PAGE and HPLC.

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**Source** Escherichia coli.

**MW** 16.3 kDa, observed by non-reducing SDS-PAGE.

**Expiration Date** 6 months from date of receipt.

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