

## **DATASHEET** Version 20181206

## IL-3, Canine

Cat. No.: Z02783-10

Size: 10.0 ug

Synonyms: Interleukin-3 (IL-3), Canine;

## **Description:**

IL-3 is a hematopoietic growth factor that promotes the survival, differentiation and proliferation of committed progenitor cells of the megakaryocyte, granulocyte-macrophage, erythroid, eosinophil, basophil and mast cell lineages. Produced by T cells, mast cells and eosinophils, IL-3 enhances thrombopoieses, phagocytosis, and antibody-mediated cellular cytotoxicity. Its ability to activate monocytes suggests that IL-3 may have additional immunoregulatory roles. Many of the IL-3 activities depend upon co-stimulation with other cytokines. IL-3 is species-specific, variably glycosylated cytokine.

## **Amino Acid Sequence:**

00001 RPFSTDLPKQ YFTMINEIME MLNKSPSPSE EPLDSNEKET 00041 LLEDTLLRPN LDVFLNASSK FHKNGLLIWN NLKEFLPLLP 00081 TPTPRGEPIS IMENNWGDFQ RKLKKYLEAL DNFLNFKNKP Source: E. coli
Species: Canine

**Biological Activity**: Fully biologically active when compared to standard. The  $ED_{50}$  as determined by a cell proliferation assay using human TF-1 cells is less than 0.2 ng/ml, corresponding to a specific activity of  $> 5.0 \times 10^6$  IU/mg.

**Molecular Weight**: Approximately 14.0 kDa, a single non-glycosylated polypeptide chain containing 120 amino acids.

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

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

**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.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

**Endotoxin Level**: Less than 1 EU/µg of rCalL-3 as determined by LAL method.

**Storage**: 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.