

Recombinant Canine Interleukin-3 (rCaIL-3)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

131-03

Source:

Escherichia coli.

Molecular Weight:

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

Quantity:

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

AA Sequence:

RPFSTDLPKQ YFTMINEIME MLNKSPSPSE EPLDSNEKET LLEDTLLRPN

LDVFLNASSK FHKNGLLIWN NLKEFLPLLP TPTPRGEPIS IMENNWGDFQ

RKLKKYLEAL DNFLNFKNKP

Purity:

> 97 % 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 human TF-1 cells is less than 0.2 ng/ml, corresponding to a specific activity of $> 5.0 \times$

106 IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

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

Endotoxin:

Less than 1 EU/µg of rCaIL-3 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 $\mathbb C$. 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.

Canine Interleukin-3

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. The protein 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. The canine IL-3 reported to be a monomer, as it is known, contains 120 amino acids residues which is a single non-glycosylated polypeptide. The canine IL-3 shares < 40 % amino acid sequence identity with IL-3 of other mammals.

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