

BACKGROUND

Interleukin-5 (IL-5) is a hematopoietic growth factor expressed in Th2, mast cells and eosinophils. IL-5 acts through its receptor, the IL-5 receptor (IL-5R) and is involved in B-cell growth and eosinophil activation. IL-5 has been shown to be and is regulated by GATA-3, in addition to other transcription factors. Human and mouse IL-5 are cross-reactive.

Recombinant mouse IL-5 is a non-glycosylated, disulfide-linked homodimer. It is comprised of two 113 amino acid chains with a total molecular weight of 26.2 kDa.

Alternative Names:

EDF, BCDP2, TRF

Amino Acid Sequence:

MEIPMSTVVK ETLTQLSAHR ALLTSNETMR LPVPTHKNHQ
LCIGEIFQGL DILKNQTVRG GTVEMLFQNL SLIKKYIDRQ
KEKCGEERRR TRQFLDYLQE FLGVMSTEWA MEG

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant mouse IL-5 is lyophilized from 20 mM Na₂PO₄, pH 7.5.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is calculated by the dose-dependent induction of TF-1 cell proliferation and is typically less than 2 ng/ml.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

