

# Interleukin-17F, mouse recombinant (rmIL-17F)

Catalog No: 97244
Lot No: XXXXX
Source: E. coli

Synonyms: Cytokine ML-1, IL-17F, Interleukin-17F precursor, IL17F, ML1, ML-1

### **Background**

IL-17F having an accession number of Q96PD4 is a cytokine that shares sequence similarity with IL17. IL-17F is expressed by activated T cells, and has been shown to stimulate the production of several other cytokines, including IL6, IL8, and CSF2/GM-CSF. IL-17F inhibits the angiogenesis of endothelial cells and induce endothelial cells to produce IL2, TGFB1/TGFB, and monocyte chemoattractant protein-1. IL-17F induces stromal cells to produce proinflammatory and hematopoietic cytokines. Intestinal IL17F gene expression is increased in active CD. IL-17A & IL-17F alleles influence the susceptibility to and pathophysiological features of ulcerative colitis independently. IL-17F and MIF gene polymorphisms are significantly associated with the development of functional dyspepsia. The initiation of IL-17F/IL-17R signaling pathway requires the receptor ubiquitination by TRAF6. IL-17F induces expression of IFN-gamma-inducible protein 10 (IP-10) by activating Raf1-mitogen-activated protein kinase 1/2-extracellular-regulated kinase 1/2-p90 ribosomal S6 kinase-cyclic AMP response element-binding protein signaling pathway.

## Description

Interleukin-17F mouse recombinant produced in *E. coli* is a homodimeric, non-glycosylated polypeptide chain containing a total of 266 amino acids and having a molecular mass of 29.8 kDa. Mouse IL-17F is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

IL17F was lyophilized from a concentrated (1 mg/ml) solution containing no additives.

#### Solubility

It is recommended to reconstitute the lyophilized Interleukin-17F in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

## Stability

Lyophilized IL-17F, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-17F should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

## **Purity**

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

## **Amino Acid Sequence**

RKNPKAGVPA LQKAGNCPPL EDNTVRVDIR IFNQNQGISV PREFQNRSSS PWDYNITRDP HRFPSEIAEA QCRHSGCINA QGQEDSTMNS VAIQQEILVL RREPQGCSNS FRLEKMLLKV GCTCVKPIVH QAA





## Usage

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