

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

Catalog No: 87321 Lot No: XXXXX Source: E. coli

Synonyms: CTLA-8, IL-17, IL-17A, Cytotoxic T-lymphocyte-associated antigen 8

#### **Background**

IL17 is a proinflammatory cytokine produced by activated T cells. IL-17 regulates the activities of NF-kappaB and mitogen-activated protein kinases. Interleukin-17 can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis.

## Description

Interleukin-17 murine recombinant produced in *E. coli* is a homodimeric, non-glycosylated polypeptide chain containing a total of 268 (2x134) amino acids and having a molecular mass of 30 kDa. IL-17 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

### **Formulation**

Lyophilized from a concentrated (1 mg/ml) solution containing no additives.

#### Solubility

It is recommended to reconstitute the lyophilized Interleukin-17 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 Interleukin-17, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-17 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 98.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

#### **Amino Acid Sequence**

MAAIIPQSSA CPNTEAKDFL QNVKVNLKVF NSLGAKVSSR RPSDYLNRST SPWTLHRNED PDRYPSVIWE AQCRHQRCVN AEGKLDHHMN SVLIQQEILV LKREPESCPF TFRVEKMLVG VGCTCVASIV RQAA

## **Activity**

The ED50 as determined by the dose-dependant induction of IL-6 production in cultured mouse NIH 3T3 fibroblasts was found to be 0.4 ng/ml, corresponding to a specific activity of 2,500,000 units/mg.





## Usage

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