

# Interleukin-17A, human recombinant (rHulL-17A)

Catalog No: 94896 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-17A human recombinant produced in *E. coli* is a homodimeric, non-glycosylated polypeptide chain containing a total of 264 amino acids (2 chains of 132 aa) and having a molecular mass of 31 kDa. IL-17 is purified by proprietary chromatographic techniques.

# **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

Sterile filtered lyophilized (freeze-dried) powder, with 20 mM citrate, 0.1 M NaCl, pH4.5.

#### 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-17A, 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 95.0% as determined by SDS-PAGE.

#### Activity

The ED50 as determined by the dose-dependent induction of IL-6 in Hs68 cell line was found to be approximately 2 ng/ml corresponding to a specific activity of 500,000 IU/mg.

## Usage

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