

# Recombinant Human IL-17A

(Interleukin-17A)

Catalog Number: 100-87 Accession Number: Q16552

# Specifications and Uses:

Alternate Names: IL-17, CTLA-8

## **Description:**

Interleukin-17A (IL-17A), also known as CTLA-8, is a pro-inflammatory cytokine member of a six-species family of proteins (IL-17A-17F). IL-17A is secreted mainly by activated CD4+ and CD8+ T lymphocytes and acts through its receptor, IL-17R, to induce the expression of many mediators of inflammation, most importantly, those that are involved in the proliferation, maturation and chemotaxis of neutrophils. Elevated levels of IL-17A have been associated with several conditions, including rheumatoid arthritis, airway inflammation, allograft rejection, inflammatory bowel disease, psoriasis, cancer and multiple sclerosis. Human, mouse and rat IL-17A show activity on mouse cells. Recombinant human IL-17A is a non-glycosylated, disulfide-linked, homodimer containingtwo 137 amino acid chainss, with a total molecular weight of 31 kDa.

Source: E.coli

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

#### Formulation and Stability:

Recombinant human IL-17A is lyophilized with no additives.

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 (typically $\geq 98\%$ ) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

# **Endotoxin Level:**

Measured by kinetic LAL analysis and is typically  $\leq 1$  EU/µg protein.

#### **Biological Activity:**

The activity is determined by a dose-dependent production of IL-6 in cultured mouse NIH 3T3 fibroblasts and is typically 1.5-7 ng/mL.

## **AA Sequence:**

MIVKAGITIP RNPGCPNSED KNFPRTVMVN LNIHNRNTNT NPKRSSDYYN RSTSPWNLHR NEDPERYPSV IWEAKCRHLG CINADGNVDY HMNSVPIQQE ILVLRREPPH CPNSFRLEKI LVSVGCTCVT PIVHHVA

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

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