

BACKGROUND

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 consisting of two 137 amino acid proteins and having a total molecular mass of 31 kDa.

Alternative Names:

IL-17, CTLA-8

Amino Acid Sequence:

MIVKAGITIP RNPGCNPSED KNFPRVTMVN LNIHNRNTNT
NPKRSSDYIN RSTSPWNLHR NEDPERYPSV IWEAKCRHLG
CINADGNVDY HMNSVPIQQE ILVLRREPPH CPNSFRLEKI
LVSVGCTCVT PIVHHVA

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

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

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

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

