

BACKGROUND

Interleukin-17AF (IL-17AF) is a member of the IL-17 family of proteins produced by a subset of T cells, called Th17, following stimulation with IL-23. Since IL-17AF is thought to signal through the IL-17RA receptor, its biological function is similar to that of IL-17A in that it induces the production of a variety of chemokines, in addition to airway neutrophilia. In regard to these functions, IL-17AF has less activity than the IL-17A homodimer but, greater activity than the IL-17F homodimer. Human and rat IL-17AF both show activity on mouse cells.

Recombinant human IL-17AF is a non-glycosylated heterodimer, comprised of one monomeric subunit each of IL-17A and IL-17F. The dimer consists of 271 amino acids, with an approximate molecular weight of 30.7 kDa.

Alternative Names:

None

Amino Acid Sequence:

IL-17A:MIVKAGITIP RNPGPCNSED KNFPRTVMVN
LNIHNRNTNT NPKRSSDYNN RSTSPWNLHR NEDPERYPSV
IWEAKCRHLG CINADGNVDY HMNSVPIQQE ILVLRREPPH
CPNSFRLEKI LVSVGCTCVT PIVHHVA

IL-17F:MRKIPKVGHT FFQKPESCPP VPGGSMKLDI
GIINENQRVS MSRNIESRST SPWNYTVTWD PNRYPSEVVQ
AQCRNLGCIN AQGKEDISMN SVPIQQETLV VRRKHQGCVS
SFQLEKVLVT VGCTCVTPVI HHVQ

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human IL-17AF 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 3-15 ng/mL.

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

