Recombinant Human Interleukin-17F (IL17F)

(Cat. No.: C030)

Background:

IL-17 is a potent proinflammatory cytokine produced by activated memory T cells. There are at least six members of the IL-17 family in humans and in mice.

Today, IL-17 represents a family of structurally-related cytokines that share a highly conserved C-terminal region but differ from one another in their N-terminal regions and in their distinct biological roles. The six known members of this family, IL-17A through IL-17F, are secreted as homodimers. IL-17F also regulates cartilage matrix turnover and inhibits angiogenesis.

Description:

Recombinant Human IL-17F produced in *E. coli* is a disulfide-linked homodimer of 30.1 kDa, consisting of two 134 amino acid residue non-glycosylated polypeptide chains.

Quality Control:

Biological Activity: The ED50 as determined by the dose-dependent induction of IL-6 in NIH-3T3 cells was found to be approximately 10ng/ml, corresponding to a Specific Activity of 1.0×10^5 IU/mg.

Purity: Greater than 98.0% as determined by:

  (a) Analysis by RP-HPLC.
  (b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel. **Amino-Acid Sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Met-Arg-Lys-Ile-Pro.

Endotoxin: Less than 0.1ng/µg (1 IEU/µg) of rHuIL-17F.

Formulation: Lyophilized from a concentrated (1mg/ml) solution containing 20mM phosphate buffer at pH7.4.

Storage: Lyophilized rHuIL-17F although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuIL- 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 avoid freeze-thaw cycles. For laboratory in vitro research use only.

Reconstitution: It is recommended to reconstitute the lyophilized rHuIL- 1 7F in sterile 1 8MΩ-cm H2O not less than 1 00µg/ml, which can then be further diluted to other aqueous solutions.