

Recombinant Rat IL-17A

Catalog # FL003

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 95% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ μ g of rRtIL-17A protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Rat
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by inducing IL-6 secretion of murine NIH/3T3 cells is less than 1.0 ng/ml, corresponding to a specific activity of $\geq 1.0 \times 10^6$ IU/mg.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM PB, with 300 mM NaCl, pH 6.5.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Accession #	Q61453 Ala18-Ser150
Amino acid sequence	AVLIPQSSVCPNAEANNFLQNVKVNLIKVINSLSKASSRRRPSDYLNRRSTSPWTLRSNEDPDRYPSVIWEAQCRHQRCVNAEGKLDHMHMSVLIQQEILVLKREPEKCPFTFRVEKMLVGVGCTCVSSIVRHAS
Molecular weight	Approximately 30 kDa, a homodimer of two 133 amino acids polypeptide chains.
Synonyms	IL-17, CTLA-8
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$. Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Rat IL-17A is for research use only and not for use in diagnostic or therapeutic procedures.

Background

The originally described IL-17 protein, now known as IL-17A, is a homodimer of two 133 amino acid chains that are secreted by activated T-cells, which act on stromal cells to induce production of proinflammatory and hematopoietic bioactive molecules. Human Interleukin-17A (IL-17A) is encoded by the IL17A gene located on the chromosome 6 and belongs to the IL-17 family that contains IL-17A, IL-17B, IL-17C, IL-17D, IL-17E and IL-17F. The six known members of this family are secreted as homodimers. Mature rat IL-17A shares 60% and 89% amino acid sequence identity with human and mouse IL-17A, respectively. IL-17A exhibits cross-species bioactivity between human and murine cells. Recombinant Rat IL-17A is a 30.0kDa, disulfide-linked homodimer of two 133 amino acid polypeptide chains.

