

Interleukin-17A, rat recombinant (rrIL-17A)

Catalog No: 97084
Lot No: XXXXX
Source: E. coli

Synonyms: CTLA-8, IL-17, IL-17A, Cytotoxic T-lymphocyte-associated antigen 8, Interleukin-17A

Background

IL17 is a proinflammatory cytokine produced by activated T cells. IL-17 regulates the activities of NF-kappaB and mitogen-activated protein kinases. Interleukin-17 can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis.

Description

Interleukin-17A rat recombinant produced in *E. coli* is a homodimeric, non-glycosylated polypeptide chain having a molecular mass of 30 kDa. IL-17A rat is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a concentrated (1 mg/ml) solution containing 10 mM Na citrate, pH 3.0.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-17A in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin 17A, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rat IL17 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 prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

MAVLIPQSSV CPNAEANNFL QNVKVNLKVL NSLSSKASSR RPSDYLNRST SPWTLSRNED PDRYPSVIWE AQCRHQRCVN AEGKLDHHMN SVLIQQEILV LKREPEKCPF TFRVEKMLVG VGCTCVSSIV RHAS

Activity

Rat IL-17A is fully biologically active when compared to standards via dose-dependent induction of IL-6 production in cultured mouse NIH 3T3 fibroblasts. The ED50 for recombinant rat IL-17A in this assay was 30 ng/ml. The specific activity is 33333.33 units/mg.





Usage

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