

Rantes (CCL5), rat recombinant (rrCCL5)

Catalog No: 08569
Lot No: XXXXX
Source: E. coli

Synonyms: Small inducible cytokine A5, CCL5, T-cell-specific RANTES protein, SIS-delta, T cell- specific protein P228,

TCP228, chemokine (C-C motif) ligand 5, SISd, SCYA5, RANTES, D17S136E, MGC17164

Background

Regulated upon Activation, Normal T-cell Expressed, and Secreted or RANTES is an 8 kDa protein classified as a chemotactic cytokine or chemokine. It has recently been renamed CCL5. RANTES is chemotactic for T cells, eosinophils and basophils and plays an active role in recruiting leukocytes into inflammatory sites. With the help of particular cytokines (i.e. IL-2 and IFN-?) that are released by T cells, RANTES also induces the proliferation and activation of certain natural killer (NK) cells to form CHAK (CC-Chemokine-activated killer) cells. It is also a HIV-suppressive factor released from CD8+ T cells. This chemokine has been localized to chromosome 17 in humans.

Description

Rantes rat recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 68 amino acids and having a molecular mass of 7876 Dalton. Rantes is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a concentrated (1 mg/ml) solution in water containing no additives.

Solubility

It is recommended to reconstitute the lyophilized Rantes 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 Rantes, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Rat CCL5 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

SPYGSDTTPC CFAYLSLALP RAHVKEYFYT SSKCSNLAVV FVTRRNROVC ANPEKKWVQE YINYLEMS

Activity

The activity is determined by the ability to chemoattract total human lymphocytes and murine T-cells at a concentration between 1 - 10 ng/ml corresponding to a specific activity of 100,000 - 1,000,000 IU/mg.





Usage

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