

# Rantes (CCL5), human recombinant (rHuRantes)

Catalog No: 94866 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. Rantes 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-g) 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. Rantes is also an HIV-suppressive factor released from CD8+ T cells. The Rantes chemokine has been localized to chromosome 17 in humans.

# Description

Rantes human recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 68 amino acids and having a molecular mass of 7809.2 Dalton. Rantes is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

# **Formulation**

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

# Solubility

It is recommended to reconstitute the lyophilized Rantes in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ 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 Rantes 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 98.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

# **Amino Acid Sequence**

SPYSSDTTPC CFAYIARPLP RAHIKEYFYT SGKCSNPAVV FVTRKNROVC ANPEKKWVRE YINSLEMS

#### Activity

The Rantes activity is determined by the chemoattract of human blood monocytes 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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