



Product Data Sheet

Cat # RP-1030

Recombinant Human Rantes (CCL5)

Size: 5 ug

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- $\gamma$ ) 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.

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

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**Source:** *Escherichia Coli*. 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. The Rantes is purified by proprietary chromatographic techniques. The Rantes was lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

**Applications and Suggested Dilutions:** Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. It is recommended to reconstitute the lyophilized Rantes in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions. Users must optimize the appropriate concentration and conditions for each assay.

**Storage and Stability:** Lyophilized Rantes although stable at room temperature for 3 weeks, should be stored desiccated below -18 $^{\circ}$ C. Upon reconstitution CCL5 should be stored at 4 $^{\circ}$ C between 2-7 days and for future use below -18 $^{\circ}$ C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4 $^{\circ}$ C for ~1 week or aliquots in suitable size and store at -20 $^{\circ}$ C for long term storage.  
**Please prevent freeze-thaw cycles.**

**Biological Activity:** ED<sub>50</sub> range=5.0-20 ng/ml, determined by the dose dependent chemotaxis of THP-1 cells.