

**BACKGROUND**

Regulated Upon Activation Normal T cell Express Sequence (RANTES), also called CCL5, is a chemokine produced by T cells three to five days after activation. RANTES is a promiscuous chemokine that signals through several G protein-coupled receptors, CCR5, CCR3, CCR1 and US28 (a viral receptor encoded by human CMV). The main function of RANTES is to recruit immune cells to the site of inflammation.

Recombinant rat RANTES is a non-glycosylated protein, containing 68 amino acids and having a molecular mass of 7.9 kDa.

**Alternative Names:**

CCL5

**Amino Acid Sequence:**

SPYGSDDTPC CFAYLSLALP RAHVKEYFYT SSKCSNLAVV  
FVTRRNQVC ANPEKKWVQE YINYLEMS

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant rat RANTES is lyophilized with no additives.

**Stability:**

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

The activity is determined by the ability to chemoattract total human lymphocytes and mouse T-cells at 1-10 ng/mL.

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

