**CELL APPLICATIONS, INC.**

RECOMBINANT PROTEINS
**Mouse RANTES**

| SIZE | CAT. NO. |
|---|---|
| 20 ug | RP2045-20 |
| 100 ug | RP2045-100 |
| 1000 ug | RP2045-1000 |

## 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 inlcuding, 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 mouse 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:**
SPYGSDTTPC CFAYLSLALP RAHVKEYFYT SSKCSNLAVV FVTRRNRQVC ANPEKKWVQE YINYLEMS

## TECHNICAL INFORMATION

**Source:** *E.coli*

**Physical Appearance:**
Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**
Recombinant mouse 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.