## Product Name: Biotin-CCL5 (Rantes)

| Catalog Numbers: | B-CCL5-2ug | B-CCL5-10ug | B-CCL5-50ug | B-CCL5-100ug |

### DESCRIPTION

**Source**
- E. coli derived Accession # P13501 (24-91)

**Modification**
- Biotinylated

**Predicted Molecular Mass**
- 10,269.7258 Da

**Extinction Coefficient**
- 18,020 M⁻¹ cm⁻¹

### SPECIFICATIONS

**Activity**
- EC₅₀ = 0.25-0.50nM determined by Migration Assay of recombinant CCR5 containing cells

**Actual Molecular Mass**
- 10,269.7258 Da by ESI Mass Spec

**Endotoxin Level**
- <0.01 EU per 1µg of the protein by the LAL method

**Purity**
- > 97% by SDS PAGE

**Formulations**
- Lyophilized

**Carrier Protein**
- None

### PREPARATION AND STORAGE

**Reconstitution**
- Spin tube prior to resuspending. Recommended at 100µg/mL in sterile water

**Shipping**
- Room Temp

**Stability and Storage**

- Avoid repeated freeze-thaw cycles
  - 12 months from date of receipt, -20 to -70 °C as supplied.
  - Suggest to use immediately after reconstitution
  - At least 1 month at -20 to -70 °C under sterile conditions after reconstitution.

### BACKGROUND

**Description**

Regulated on Activation, Normal T cell Expressed and Secreted (RANTES) (CCL5) is a proinflammatory chemokine that induces migration and activation of leukocytes, as well as implication in HIV infection. It binds to cell surface receptors CCR1, CCR3, CCR4, and CCR5. Its biological effects on leukocyte activation and HIV infection displays dependence on concentration and on the binding of cell surface glycosaminoglycans.

**References:**

1. “RANTES: a versatile and controversial chemokine”
   Appay V., Rowland-Jones S.L.

2. “Identification of RANTES, MIP-1, and MIP-1[1] as the major HIV-suppressive factors produced by CD8+T cells”

3. A human T cell-specific molecule is a member of a new gene family
   Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C., Davis M.M., Krensky A.M.

4. “Engineering the glycosaminoglycan-binding affinity, kinetics and oligomerization behavior of RANTES: a tool for generating chemokine-based glycosaminoglycan antagonists”