

Product Information

RANTES, human recombinant, expressed in *E. coli*

Catalog Number **R6267**
Storage Temperature $-20\text{ }^{\circ}\text{C}$

Synonyms: Regulated on Activation, Normal T cell Expressed and Secreted; hSIS δ

Product Description

RANTES is a member of the chemokine superfamily platelet factor 4 (PF4).¹ This chemokine superfamily is characterized by four positionally-conserved cysteine residues and has been subdivided by the position of the first two cysteines into two branches, the chemokine α family and the chemokine β family. RANTES is a member of the chemokine β family.²

The RANTES cDNA encodes a polypeptide of 91 amino acids including an N-terminal signal sequence.³ The mature secreted protein is 68–76 amino acids with a molecular mass of 7,800–8,700 Da.⁴ RANTES is a highly basic polypeptide with a pI of 9.5 and is not glycosylated.⁴

RANTES is a chemoattractant for peripheral blood monocytes and it will selectively attract T cells of the CD4⁺/CD45RO⁺ phenotype *in vitro*.⁵ The RANTES gene maps to human chromosome 17q11.2-12.⁴ T cells, HL-60 cells, rhabdomyosarcoma (RD) cells, and MG63 osteosarcoma cells express RANTES mRNA.⁴ RANTES will mobilize Ca²⁺ in monocytes, but not in neutrophils.⁴

This recombinant product is lyophilized from a 0.2 μm filtered solution of 35% acetonitrile containing 0.1% trifluoroacetic acid and bovine serum albumin as a carrier protein.

Purity: $\geq 97\%$ (SDS-PAGE)

EC₅₀: 1–5 ng/mL

The biological activity is measured using Baf/3 cells in a chemotaxis assay.

Endotoxin level: ≤ 0.1 ng/ μg of RANTES

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the contents of the vial using 0.2 μm filtered PBS containing 0.1% BSA to a concentration of ≥ 1 $\mu\text{g}/\text{mL}$.

Storage/Stability

Store the product at $-20\text{ }^{\circ}\text{C}$.

After reconstitution, the product may be stored at $2\text{--}8\text{ }^{\circ}\text{C}$ for up to 3 months. For extended storage, freeze in working aliquots at $-70\text{ }^{\circ}\text{C}$ or $-20\text{ }^{\circ}\text{C}$. Repeated freezing and thawing is not recommended.

References

1. Staeckle, M. et al., *New Biol.*, **2**, 313 (1990).
2. Brown, K. et al., *J. Immunol.*, **142**, 679 (1989).
3. Miller, M. et al., *Critical Reviews in Immunology*, **12**(1,2), 17 (1992).
4. Schall, T. et al., *Cytokine*, **3**(3), 165 (1991).
5. Schall, T. et al., *Nature*, **347**, 669 (1990).

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