

Cytokines

Mouse/Rat Recombinant RANTES (CCL5)

Catalog # 78100
78100.1

Regulated upon activation, normal T cell expressed and secreted

20 µg
100 µg



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Product Description

RANTES (regulated upon activation, normal T cell expressed and secreted), also known as CCL5, is a member of the CC family of chemokines and is able to recruit leukocytes to sites of inflammation (Schall et al.). RANTES is secreted by T lymphocytes, macrophages, platelets, synovial fibroblasts, tubular epithelium, and certain types of tumor cells (Aldinucci & Colombatti; Soria & Ben-Baruch). This chemokine exerts its effect by interacting with the chemokine receptors CCR1, CCR3, CCR4, and CCR5. RANTES plays an active role in recruiting a variety of leukocytes into inflammatory sites, including T cells, macrophages, eosinophils, and basophils. In collaboration with certain cytokines that are released by T cells such as IL-2 and IFN-γ, RANTES also induces the activation and proliferation of NK cells to generate CC chemokine-activated killer cells, which are highly cytolytic (Lv et al.; Maghazachi et al.). It has been shown that RANTES produced by CD8+ T cells inhibits HIV infection of primary human peripheral blood mononuclear cells (Appay & Rowland-Jones; Cocchi et al.).

Product Information

Alternative Names: D17S136, Eosinophil chemotactic cytokine, Regulated upon activation normally T-expressed and secreted, SIS-delta, Small-inducible cytokine A5, T-cell specific protein p288

Accession Number: Q5XZF2

Amino Acid Sequence: SPYGSDDTPC CFAYLSLALP RAHVKEYFYT SSKCSNLAVV FVTRRNQVC ANPEKKWVQE YINYLEMS

Predicted Molecular Mass: 7.9 kDa

Species: Mouse, Rat

Formulation: Lyophilized from a sterile-filtered aqueous solution containing 0.1% trifluoroacetic acid.

Source: *E. coli*

Specifications

Activity: Biological activity was detectable at \leq 250 ng/mL as determined by a cell migration assay using THP-1 cells.

Purity: \geq 95%

Endotoxin Level: Measured by kinetic Limulus amebocyte lysate (LAL) analysis and is \leq 1 EU/µg protein.

Preparation and Storage

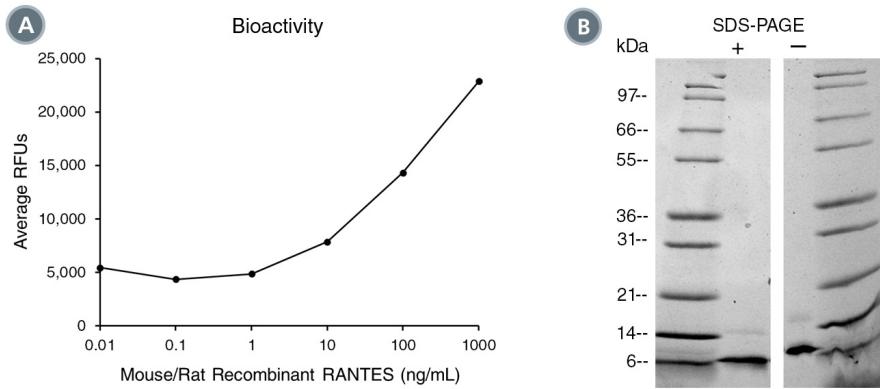
Storage: Store at -20°C to -80°C.

Stability: Stable as supplied for 12 months from date of receipt.

Preparation: Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex.

OPTIONAL: After reconstitution, if product will not be used immediately, dilute with concentrated bovine serum albumin (BSA) to a final BSA concentration of 0.1%. The effect of storage of stock solution on product performance should be tested for each application. As a general guide, do not store at 2 - 8°C for more than 1 month or at -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Mouse/Rat Recombinant RANTES (CCL5) was tested by its ability to induce chemotaxis of THP-1 cells. Cell migration was measured after 45 minutes; an increase in migration over basal level was seen starting at 10 ng/mL.

(B) 1 µg of Mouse/Rat Recombinant RANTES (CCL5) was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Mouse/Rat Recombinant RANTES (CCL5) has a predicted molecular mass of 7.9 kDa.

Related Products

For a complete list of cytokines, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/cytokines or contact us at techsupport@stemcell.com.

References

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