

Rev04 DATASHEET

Update: Mar, 01, 2022

RANTES/CCL5, Human(HEK 293-expressed)

Cat. No.: Z03238

Product Introduction

Species	Human
Protein Construction	CCL5 (Ser24-Ser91) Accession # P13501
Purity	> 98% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/µg of protein by gel clotting method
Biological Activity	The EC $_{50}$ value of human RANTES/CCL5 on Ca $^{2+}$ mobilization assay in CHO-K1/G α 15/hCCR1 cells (human G α 15 and human CCR1 stably expressed in CHO-K1 cells) is less than 0.2 µg/ml.
Expression System	HEK 293
Apparent Molecular Weight	~8 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : Chemokine (C-C motif) ligand 5(CCL5), also known as RANTES (Regulated upon activation, Normal T cell Expressed and presumable Secreted) is a CC-chemokine that can signal through the CCR1, CCR3, CCR5 and US28 (cytomegalovirus receptor) receptors. RANTES is chemotactic for T cells, eosinophils, and basophils, and plays an active role in recruiting leukocytes in inflammatory sites. With the help of specific cytokines (i.e., IL-2 and IFN-γ) that are released by T cells, RANTES induces the proliferation and activation of certain natural-killer (NK) cells to form CHAK (CC-Chemokine-activated killer) cells. RANTES is also an HIV-suppressive factor released from CD8⁺ T cells. This chemokine has been localized to chromosome 17 in humans. It has the capability to inhibit certain strains of HIV-1, HIV-2 and simian immunodeficiency virus (SIV).



Synonyms: CCL-5; D17S136E; RANTES; SCYA5; SIS-delta; SISd; TCP228; eoCP; C-C motif chemokine ligand 5

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.