

C-C motif chemokine 5 (CCL5), Human

Cat.no. PK0254

Product size: 5ug 25ug 1mg

Source: HEK 293

Species: Human

Biological Activity: The EC₅₀ value of human RANTES/CCL5 on Ca²⁺ mobilization assay in CHO-K1/Gα15/hCCR1 cells (human Gα15 and human CCR1 stably expressed in CHO-K1 cells) is less than 0.2 µg/ml.

Molecular Weight: 8 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 98% by SDS-PAGE and HPLC analyses.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human CCL5 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, human CCL5 should be stable up to 1 week at 4°C or up to 2 months at -20°C.

Description: 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). Recombinant human CCL5 produced in HEK293 cells is a single polypeptide chain containing 68 amino acids.

Amino Acid Sequence:

00001 SPYSSDTTPC CFAYIARPLP RAHIKEYFYT SGKCSNPAVV

00041 FVTRKNRQVC ANPEKKWVRE YINSLEMS

Synonyms: C-C motif chemokine 5, EoCP, Eosinophil chemotactic cytokine, SIS-delta, Small-inducible cytokine A5, T cell-specific protein P228, TCP228, T-cell-specific protein RANTES, CCL5, D17S136E, SCYA5

Note: For research use only, not for use in diagnostic procedure.