

Product Data Sheet

Recombinant Human CCL5 (RANTES) (carrier-free)

Catalog # / Size: 580202 / 10 µg
580204 / 25 µg
580206 / 100 µg
580208 / 500 µg

Source: Human RANTES, amino acids Ser24-Ser91 (Accession # NM_002985) was expressed in *E. coli*.

Molecular Mass: The 68 amino acid recombinant protein has a predicted molecular mass of approximately 7,851 Da. The DTT-reduced protein migrates at approximately 7kDa and the non-reduced protein migrates at approximately 9kDa by SDS-PAGE. The N-terminal amino acid is Serine.

Purity: Purity is >98%, as determined by Coomassie stained SDS-PAGE.

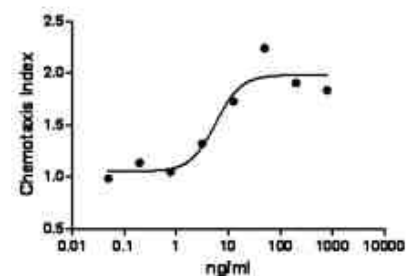
Endotoxin Level: Endotoxin level is <0.1 EU/µg (<0.01ng/µg) protein as determined by the LAL method.

Activity: Bioactivity was measured by its property to chemoattract T cells in a dose dependent manner. The ED₅₀ is 5-15 ng/ml, corresponding to a specific activity of 0.66-2.0 x 10⁵ units/mg.

Formulation: 0.22µm filtered protein solution is in 26% Acetonitrile, 0.1% TFA (trifluoroacetic acid).

Concentration: 10-100 µg sizes are bottled at 200 µg/ml. 500 µg and larger sizes are bottled at the concentration indicated on the vial.

Storage: Unopened vial can be stored at -20°C for six months or at -70°C for one year. For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10 µg/mL in buffer containing carrier protein such as 1% BSA or HSA or 10% FBS. For long term-storage, aliquot into polypropylene vials and store in a manual defrost freezer. **Avoid repeated freeze/thaw cycles.**



Chemotactic activity of human RANTES.

Applications:

Applications: Bioassay

Description: RANTES is a CC chemokine and directs the migration of leukocytes in immune and inflammatory responses. Increased CCL5/RANTES expression has been associated with a wide range of inflammatory disorders and pathologies. This cytokine has been associated as well with the induction or promotion of cancer (prostate and breast). In this latter situation, RANTES can be angiogenic and also increase the metastatic potential of cancer cells by encouraging cellular migration to sites of its production. CCL5/RANTES also inhibits HIV-1 entry and infection by competing with the virus for CCR5 binding.

Antigen References:

- Schall, *et al. Nature* 347:669-671 1990.
- Cocchi F, *et al. Science* 270:1811-1815 1995.
- Shahrara S, *et al. J Immunology* 177:5077-5087 2006.
- Larrubia JR, *et al. World J Gastroenterol* 14:7149-7159 2008.
- Gleissner CA, *et al. Arterioscler Thromb Vasc Biol* 28:1920-1927 2008.



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