

## Recombinant Human Rantes (rh Rantes / CCL5)

**Synonyms:** Regulation upon Activation Normal T cell Express Sequence, SIS-delta

**Introduction:** RANTES is a CC-chemokine that can signal through the CCR1, CCR3, CCR5 and US28 (cytomegalovirus receptor) receptors. It is chemotactic for T cells, eosinophils and basophils and plays an active role in recruiting leukocytes into inflammatory sites. With the help of particular cytokines (i.e. IL-2 and IFN- $\gamma$ ) that are released by T cells Rantes also induces the proliferation and activation of certain natural killer (NK) cells to form CHAK (CC-Chemokine-activated killer) cells. It is also a HIV-suppressive factor released from CD8+ T cells. This chemokine has been localized to chromosome 17 in humans.

**Description:** Recombinant human Rantes produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 68 amino acids and having a molecular mass of 7.8 kDa. The rh Rantes is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a 0.22  $\mu$ m filtered solution in 25 mM NaP, 250 mM NaCl, pH 7.5  
The aliquots/samples of 1 $\mu$ g contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh Rantes in sterile H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh Rantes although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh Rantes should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE / silver stain.

**Endotoxicity:** The endotoxin level is less than 1 EU /  $\mu$ g determined by LAL method

**Amino acid Sequence:** SPYSSDTTPC CFAYIARPLP RAHIKEYFYT SGKCSNPAVV FVTRKNRQVC  
ANPEKKWVRE YINSLEMS

**Biological Activity:** Biological activity was determined by its ability to chemoattract human blood monocytes at a concentration between 1 – 10 ng/ml

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 $\mu$ g	Cat.N°	11343190
<i>medium</i>	20 $\mu$ g	Cat.N°	11343194
<i>large</i>	100 $\mu$ g	Cat.N°	11343196
<i>x-large</i>	500 $\mu$ g	Cat.N°	11343197

**ImmunoTools** Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany  
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, [info@immunotools.com](mailto:info@immunotools.com)  
[www.immunotools.com](http://www.immunotools.com)