

# RANTES (N-14): sc-34843

## BACKGROUND

Structurally, C-C or  $\beta$ -chemokines are characterized by a set of conserved, adjacent cysteines. Members of this family include MCP-1, MCP-2, MCP-3, MIP-1 $\alpha$ , MIP-1 $\beta$ , RANTES and I-309. RANTES (regulated upon activation, normal T cell expressed and secreted) is expressed by platelets, eosinophils, fibroblasts, macrophages, endothelial cells and T lymphocytes. Consistent with its belonging to the chemokine family, RANTES exhibits strong chemoattractant activity towards monocytes and NK cells. I-309 was initially identified as a factor present in g/d T lymphocytes. I-309 cDNA encodes a protein 73 amino acids in length with one potential N-linked glycosylation site. Unlike the other members of the C-C family, I-309 does not induce chemotaxis in natural killer (NK) cells.

## REFERENCES

1. Miller, M.D., et al. 1989. A novel polypeptide secreted by activated human T lymphocytes. *J. Immunol.* 143: 2907-2916.
2. Loetscher, P., et al. 1996. Activation of NK cells by CC chemokines. Chemotaxis, Ca<sup>2+</sup> mobilization and enzyme release. *J. Immunol.* 156: 322-327.
3. Wells, T.N., et al. 1996. Selectivity and antagonism of chemokine receptors. *J. Leukoc. Biol.* 59: 53-60.
4. Taub, D.D., et al. 1996.  $\beta$ -chemokines costimulate lymphocyte cytolysis, proliferation and lymphokine production. *J. Leukoc. Biol.* 59: 81-89.
5. Wang, J.H., et al. 1996. Expression of RANTES by human bronchial epithelial cells *in vitro* and *in vivo* and the effect of corticosteroids. *Am. J. Respir. Cell Mol. Biol.* 14: 27-35.
6. Ying, S., et al. 1996. Human eosinophils express messenger RNA encoding RANTES and store and release biologically active RANTES protein. *Eur. J. Immunol.* 26: 70-76.
7. Lloyd, A.R., et al. 1996. Chemokines regulate T cell adherence to recombinant adhesion molecules and extracellular matrix proteins. *J. Immunol.* 156: 932-938.

## CHROMOSOMAL LOCATION

Genetic locus: CCL5 (human) mapping to 17q12; Ccl5 (mouse) mapping to 11 C.

## SOURCE

RANTES (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RANTES of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34843 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

RANTES (N-14) is recommended for detection of RANTES of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RANTES siRNA (h): sc-44066, RANTES siRNA (m): sc-45573, RANTES shRNA Plasmid (h): sc-44066-SH, RANTES shRNA Plasmid (m): sc-45573-SH, RANTES shRNA (h) Lentiviral Particles: sc-44066-V and RANTES shRNA (m) Lentiviral Particles: sc-45573-V.

Molecular Weight of RANTES: 8 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## SELECT PRODUCT CITATIONS

1. Chen, Y., et al. 2008. LPS-induced up-regulation of TGF- $\beta$  receptor 1 is associated with TNF- $\alpha$  expression in human monocyte-derived macrophages. *J. Leukoc. Biol.* 83: 1165-1173.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


 MONOS  
Satisfaction  
Guaranteed

Try **RANTES (F-11): sc-514019** or **RANTES (C-12): sc-373984**, our highly recommended monoclonal alternatives to RANTES (N-14).