# SANTA CRUZ BIOTECHNOLOGY, INC.

# RANTES (K-15): sc-34842



# BACKGROUND

Structurally, C-C or β-chemokines are characterized by a set of conserved, adjacent cysteines. Members of this family include MCP-1, MCP-2, MCP-3, MIP-1a, MIP-1B, 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  $\gamma/\delta$  T lymphocytes. I-309 cDNA encodes a protein 73 amino acids in length, with one potential N-linked glycosylation site, and migrates at a molecular weight of 15 kDa. 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. Leuko. Biol. 59: 53-60.
- 4. Taub. D.D., et al. 1996. β-chemokines costimulate lymphocyte cytolysis. proliferation and lymphokine production. J. Leukocyte 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 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RANTES of mouse origin.

## PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34842 P, (100 µg 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 (K-15) is recommended for detection of RANTES of mouse, rat and, to a lesser extent, human 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<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

# **RESEARCH USE**

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

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

# MONOS Satisfation Guaranteed

Try RANTES (F-11): sc-514019 or RANTES (C-12): sc-373984, our highly recommended monoclonal alternatives to RANTES (K-15).