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 γ/δ 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, Ca²⁺ 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[™] 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.

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).