SANTA CRUZ BIOTECHNOLOGY, INC.

RANTES (VL2): sc-32250

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-1α, MIP-1β, 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. 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^{2+} mobilization and enzyme release. J. Immunol. 156: 322-327.
3. Lloyd, A.R., et al. 1996. Chemokines regulate T cell adherence to recombinant adhesion molecules and extracellular matrix proteins. J. Immunol. 156: 932-938.
4. Wells, T.N., et al. 1996. Selectivity and antagonism of chemokine receptors. J. Leukoc. Biol. 59: 53-60.
5. Taub, D.D., et al. 1996. β chemokines costimulate lymphocyte cytolysis, proliferation and lymphokine production. J. Leukoc. Biol. 59: 81-89.
6. 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.
7. 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.

CHROMOSOMAL LOCATION

Genetic locus: CCL5 (human) mapping to 17q12.

SOURCE

RANTES (VL2) is a mouse monoclonal antibody raised against recombinant RANTES protein.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

RANTES (VL2) is recommended for detection of RANTES of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

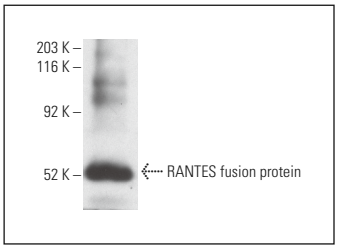
Suitable for use as control antibody for RANTES siRNA (h): sc-44066, RANTES shRNA Plasmid (h): sc-44066-SH and RANTES shRNA (h) Lentiviral Particles: sc-44066-V.

Molecular Weight of RANTES: 8 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Western blot analysis of human recombinant RANTES fusion protein immunoprecipitated with RANTES (VL2): sc-32250 and detected with RANTES (C-19): sc-1410.

RESEARCH USE

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

PROTOCOLS

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