SANTA CRUZ BIOTECHNOLOGY, INC.

I-309 (C-19): sc-1412

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 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. Lloyd, A.R., et al. 1996. Chemokines regulate T cell adherence to recombinant adhesion molecules and extracellular matrix proteins. J. Immunol. 156: 932-938.
3. Taub, D.D., et al. 1996. Beta chemokines costimulate lymphocyte cytolysis, proliferation and lymphokine production. J. Leukocyte Biol. 59: 81-89.
4. Wells, T.N., et al. 1996. Selectivity and antagonism of chemokine receptors. J. Leukocyte Biol. 59: 53-60.
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. Amer. J. Resp. 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. Euro. J. Immunol. 26: 70-76.
7. Loetscher, P., et al. 1996. Activation of NK cells by CC chemokines. Chemotaxis, Ca^{2+} mobilization and enzyme release. J. Immunol. 156: 322-327.

CHROMOSOMAL LOCATION

Genetic locus: CCL1 (human) mapping to 17q12; Ccl1 (mouse) mapping to 11 C.

SOURCE

I-309 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of I-309 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1412 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

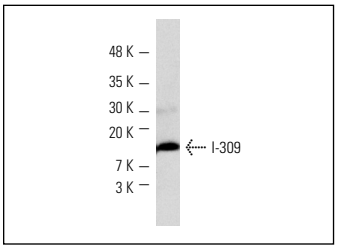
APPLICATIONS

I-309 (C-19) is recommended for detection of I-309 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)], 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).

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



I-309 (C-19): sc-1412. Western blot analysis of human recombinant I-309.

STORAGE

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

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.