

RANTES (F-11): sc-514019

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-1 α , MIP-1 β , 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. Wells, T.N., et al. 1996. Selectivity and antagonism of chemokine receptors. *J. Leukoc. Biol.* 59: 53-60.
3. Taub, D.D., et al. 1996. β chemokines costimulate lymphocyte cytolysis, proliferation and lymphokine production. *J. Leukoc. Biol.* 59: 81-89.
4. 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.
5. 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 (F-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 24-91 at the C-terminus of RANTES of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RANTES (F-11) is available conjugated to agarose (sc-514019 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514019 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514019 PE), fluorescein (sc-514019 FITC), Alexa Fluor[®] 488 (sc-514019 AF488), Alexa Fluor[®] 546 (sc-514019 AF546), Alexa Fluor[®] 594 (sc-514019 AF594) or Alexa Fluor[®] 647 (sc-514019 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514019 AF680) or Alexa Fluor[®] 790 (sc-514019 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

RANTES (F-11) is recommended for detection of RANTES of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

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.

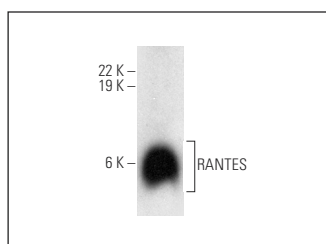
Molecular Weight of RANTES: 8 kDa.

Positive Controls: human platelet extract: sc-363773.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



RANTES (F-11): sc-514019. Western blot analysis of RANTES expression in human platelet extract.

SELECT PRODUCT CITATIONS

1. Huang, X., et al. 2015. Chronic alcohol exposure exacerbates inflammation and triggers pancreatic acinar-to-ductal metaplasia through PI3K/Akt/IKK. *Int. J. Mol. Med.* 35: 653-663.
2. Wang, Q., et al. 2020. ARC is a critical protector against inflammatory bowel disease (IBD) and IBD-associated colorectal tumorigenesis. *Cancer Res.* E-published.

STORAGE

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

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