SANTA CRUZ BIOTECHNOLOGY, INC.

IP-10 (FL-98): sc-28877

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chemokines are members of a superfamily of inducible, secreted, pro-inflammatory cytokines. Members of the chemokine family exhibit 20% to 50% homology in their predicted amino acid sequences and are divided into four subfamilies: C-C, C-X-C, C and C-X3-C. In the C-X-C or α subfamily, the first two of four cysteine motifs are separated by another amino acid residue. In the second subfamily, designated C-C or β, the first cysteines are adjacent. C subfamily members, also designated γ chemokines, lack the first and third cysteine residues of the conserved motif. In the C-X3-C, or δ subfamily, members have three amino acids between the two cysteines. The C-X-C chemokine subfamily includes IL-8, GROα/β/γ (and the murine homologs KC, MIP-2α and MIP-2β), platelet basic protein, ENA-78, GCP-2, PF4, IP-10 (and its murine homolog, CRG) and MIG.

REFERENCES

1. Oppenheim, J.J., et al. 1991. Properties of the novel proinflammatory supergene "intercrine" cytokine family. Ann. Rev. Immunol. 9: 617-648.
2. Schall, T.J. 1991. Biology of the RANTES/SIS cytokine family. Cytokine. 3: 165-183.
3. Miller, M.D., et al. 1992. Biology and biochemistry of the chemokines: a family of chemotactic and inflammatory cytokines. Crit. Rev. Immunol. 12: 17-46.
4. Taub, D.D., et al. 1993. Review of the chemokine meeting of the Third International Symposium of Chemotactic Cytokines. Cytokine 5: 175-179.
5. Roth, S.J., et al. 1995. C-C chemokines, but not the C-X-C chemokines interleukin-8 and interferon-γ inducible protein-10, stimulate transendothelial chemotaxis of T lymphocytes. Euro. J. Immunol. 25: 3482-3488.
6. Godiska, R., et al. 1995. Chemokine expression in murine experimental allergic encephalomyelitis. J. Neuroimmunol. 58: 167-176.
7. Cook, D.N. 1996. The role of MIP-1α in inflammation and hematopoiesis. J. Leukoc. Biol. 59: 61-66.

CHROMOSOMAL LOCATION

Genetic locus: CXCL10 (human) mapping to 4q21.1; Cxcl10 (mouse) mapping to 5 E2.

SOURCE

IP-10 (FL-98) is a rabbit polyclonal antibody raised against amino acids 1-98 representing full length IP-10 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.

STORAGE

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

APPLICATIONS

IP-10 (FL-98) is recommended for detection of IP-10 of human and, to a lesser extent, mouse and rat 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).

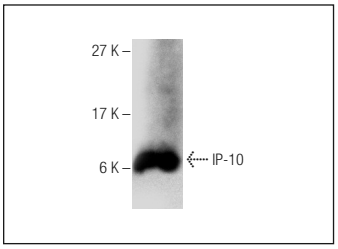
Suitable for use as control antibody for IP-10 siRNA (h): sc-43866, IP-10 siRNA (m): sc-108021, IP-10 shRNA Plasmid (h): sc-43866-SH, IP-10 shRNA Plasmid (m): sc-108021-SH, IP-10 shRNA (h) Lentiviral Particles: sc-43866-V and IP-10 shRNA (m) Lentiviral Particles: sc-108021-V.

Molecular Weight of IP-10: 10 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IP-10 (FL-98): sc-28877. Western blot analysis of human recombinant IP-10.

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.