

IP-10 (G-15): sc-14641

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, GRO α / β / γ (and the murine homologs KC, MIP-2 α and MIP-2 β), 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. and Krangel, M.S. 1992. Biology and biochemistry of the chemokines: a family of chemotactic and inflammatory cytokines. *Crit. Rev. Immunol.* 12: 17-46.
4. Taub, D.D. and Oppenheim, J.J. 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-g 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.

CHROMOSOMAL LOCATION

Genetic locus: Cxcl10 (mouse) mapping to 5 E2.

SOURCE

IP-10 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IP-10 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-14641 P, (100 μ g 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

IP-10 (G-15) is recommended for detection of IP-10 of mouse and rat 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 IP-10 siRNA (m): sc-108021, IP-10 shRNA Plasmid (m): sc-108021-SH 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 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.

SELECT PRODUCT CITATIONS

1. Cho, Y., et al. 2004. Noise overstimulation induces immediate early genes in the rat cochlea. *Brain Res. Mol. Brain Res.* 130: 134-148.
2. Bermudez-Humaran, L.G., et al. 2005. A novel mucosal vaccine based on live Lactococci expressing E7 antigen and IL-12 induces systemic and mucosal immune responses and protects mice against human papillomavirus type 16-induced tumors. *J. Immunol.* 175: 7297-7302.
3. Nakaya, I., et al. 2007. Blockade of IP-10/CXCR3 promotes progressive renal fibrosis. *Nephron Exp. Nephrol.* 107: e12-e21.
4. Hörmannspurger, G., et al. 2009. Post-translational inhibition of IP-10 secretion in IEC by probiotic bacteria: impact on chronic inflammation. *PLoS ONE* 4: e4365.

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.



Try **IP-10 (E-2): sc-374092**, our highly recommended monoclonal alternative to IP-10 (G-15).