

GRO α / β / γ (FL-100): sc-28972

BACKGROUND

Chemokines are members of a superfamily of small, 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. In the C-X-C or α subfamily, the first two of four cysteine motifs are separated by another amino acid residue. The C-X-C chemo-kine subfamily includes GRO α / β / γ (and the murine homologs designated GRO α , MIP-2, and Cxcl3), platelet basic protein, ENA-78, GCP-2, PF4, IP-10 (and its murine homolog, CRG) and MIG. GRO α , β and γ (growth-related oncogene α / β / γ) are C-X-C chemokines important for the regulation of cell motility and growth. They function as neutrophil chemoattractants and mediators of angiogenesis. The GRO proteins may play a role in melanocyte progression to malignant melanoma.

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-1a in inflammation and hematopoiesis. *J. Leukocyte Biol.* 59: 61-66.
8. Li, J. and Sidell, N. 2005. Growth-related oncogene produced in human breast cancer cells and regulated by Syk protein-tyrosine kinase. *Int. J. Cancer* 117: 14-20.

CHROMOSOMAL LOCATION

Genetic locus: CXCL1/CXCL2/CXCL3 (human) mapping to 4q13.3; Cxcl1/Cxcl2/Cxcl3 (mouse) mapping to 5 E1.

SOURCE

GRO α / β / γ (FL-100) is a rabbit polyclonal antibody raised against amino acids 1-100 representing full length MIP-2 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.

APPLICATIONS

GRO α / β / γ (FL-100) is recommended for detection of GRO α , MIP-2, and Cxcl3 of mouse and rat origin, and to a lesser extent, GRO α , GRO β and GRO γ of human origin by Western Blotting (starting dilution 1:200, 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).

Molecular Weight of GRO α / β / γ : 8 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.

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.



Try GRO α / β / γ (A-6): sc-365870, our highly recommended monoclonal alternative to GRO α / β / γ (FL-100).