

# GRO $\alpha$ (R-16): sc-21619

## 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  $\alpha$  subfamily, the first two of four cysteine motifs are separated by another amino acid residue. The C-X-C chemokine subfamily includes IL-8, GRO $\alpha$ / $\beta$ / $\gamma$  (and the murine homologs KC, MIP-2 $\alpha$  and MIP-2 $\beta$ ), platelet basic protein, ENA-78, GCP-2, PF4, IP-10 (and its murine homolog, CRG) and MIG.

## REFERENCES

- Oppenheim, J.J., Zachariae, C.O., Mukaida, N. and Matsushima, K. 1991. Properties of the novel proinflammatory supergene "intercrine" cytokine family. *Annu. Rev. Immunol.* 9: 617-648.
- Schall, T.J. 1991. Biology of the RANTES/SIS cytokine family. *Cytokine* 3: 165-183.
- 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.
- 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.
- Roth, S.J., Carr, M.W. and Springer, T.A. 1995. C-C chemokines, but not the C-X-C chemokines interleukin-8 and interferon- $\gamma$  inducible protein-10, stimulate transendothelial chemotaxis of T lymphocytes. *Eur. J. Immunol.* 25: 3482-3488.
- Godiska, R., Chantry, D., Dietsch, G.N. and Gray, P.W. 1995. Chemokine expression in murine experimental allergic encephalomyelitis. *J. Neuroimmunol.* 58: 167-176.
- Cook, D.N. 1996. The role of MIP-1 $\alpha$  in inflammation and hematopoiesis. *J. Leukoc. Biol.* 59: 61-66.

## CHROMOSOMAL LOCATION

Genetic locus: Cxcl1 (mouse) mapping to 5 E1.

## SOURCE

GRO $\alpha$  (R-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GRO $\alpha$  of rat origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-21619 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4 $^{\circ}$  C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

GRO $\alpha$  (R-16) is recommended for detection of GRO $\alpha$  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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GRO $\alpha$  (R-16) is also recommended for detection of GRO $\alpha$  in additional species, including bovine and porcine.

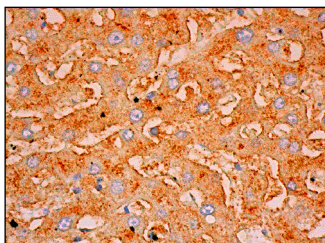
Suitable for use as control antibody for GRO $\alpha$  siRNA (m): sc-72160, GRO $\alpha$  shRNA Plasmid (m): sc-72160-SH and GRO $\alpha$  shRNA (m) Lentiviral Particles: sc-72160-V.

Molecular Weight of GRO $\alpha$ : 12 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz<sup>™</sup>: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



GRO $\alpha$  (R-16): sc-21619. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.