SANTA CRUZ BIOTECHNOLOGY, INC.

GROβ (C-15): sc-1375



BACKGROUND

Chemokines are members of a superfamily of small, inducible, secreted, proinflammatory 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 chemokine subfamily includes IL-8, GRO $\alpha/\beta/\gamma$ (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. GRO α , β and γ (growth-related onconge $\alpha/\beta/\gamma$) 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

- Oppenheim, J.J., et al. 1991. Properties of the novel proinflammatory supergene "intercrine" cytokine family. Annu. 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.

CHROMOSOMAL LOCATION

Genetic locus: CXCL2 (human) mapping to 4q13.3.

SOURCE

 $GRO\beta$ (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of $GRO\beta$ of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1375 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GRO β (C-15) is recommended for detection of GRO β 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), 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).

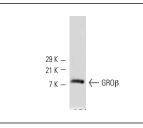
Suitable for use as control antibody for GRO β siRNA (h): sc-43934, GRO β shRNA Plasmid (h): sc-43934-SH and GRO β shRNA (h) Lentiviral Particles: sc-43934-V.

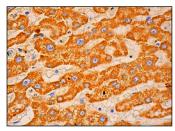
Molecular Weight of GROB: 8 kDa.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA





 $GR0\beta$ (C-15): sc-1375. Western blot analysis of human recombinant $GR0\beta.$

GROβ (C-15): sc-1375. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

SELECT PRODUCT CITATIONS

- 1. De Paepe, B., et al. 2005. $\alpha\text{-chemokine}$ receptors CXCR1-3 and their ligands in idiopathic inflammatory myopathies. Acta Neuropathol. 109: 576-582.
- 2. Verhaeghe, C., et al. 2007. Early inflammation in the airways of a cystic fibrosis foetus. J. Cyst. Fibros. 6: 304-308.
- De Paepe, B., et al. 2012. Upregulation of chemokines and their receptors in duchenne muscular dystrophy: potential for attenuation of myofiber necrosis. Muscle Nerve 45: 914-916.

STORAGE

Store at 4° C, **D0 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.

MONOS Try Satisfation red Guaranteed

Try **GROα/β/γ (A-6): sc-365870**, our highly recommended monoclonal alternative to GROβ (C-15).