

GRO α / β / γ (A-6): sc-365870

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 chemokine 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.

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 (A-6) is a mouse monoclonal antibody raised against amino acids 1-100 representing full length MIP-2 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GRO α / β / γ (A-6) is available conjugated to agarose (sc-365870 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365870 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365870 PE), fluorescein (sc-365870 FITC), Alexa Fluor[®] 488 (sc-365870 AF488), Alexa Fluor[®] 546 (sc-365870 AF546), Alexa Fluor[®] 594 (sc-365870 AF594) or Alexa Fluor[®] 647 (sc-365870 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365870 AF680) or Alexa Fluor[®] 790 (sc-365870 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

GRO α / β / γ (A-6) is recommended for detection of GRO α of mouse, rat and human origin, GRO β and GRO γ of human origin, MIP-2 and Cxcl3 of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:100, 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).

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

Positive Controls: Jurkat whole cell lysate: sc-2204.

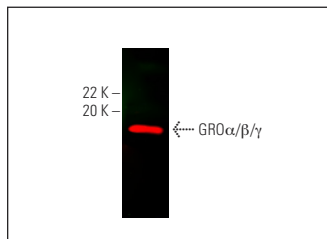
RESEARCH USE

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

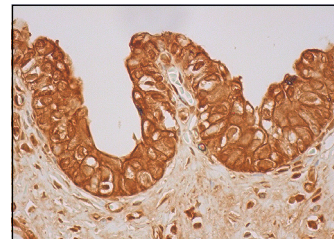
STORAGE

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

DATA



GRO α / β / γ (A-6) Alexa Fluor[®] 790: sc-365870 AF790. Direct near-infrared western blot analysis of GRO α / β / γ expression in Jurkat whole cell lysate. Blocked with UltraCruz[®] Blocking Reagent: sc-516214.



GRO α / β / γ (A-6): sc-365870. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic and membrane staining of urothelial cells.

SELECT PRODUCT CITATIONS

- Ding, J., et al. 2018. Overexpression of CXCL2 inhibits cell proliferation and promotes apoptosis in hepatocellular carcinoma. *BMB Rep.* 51: 630-635.
- Cai, Q., et al. 2021. Inflammation-associated senescence promotes *Helicobacter pylori*-induced atrophic gastritis. *Cell. Mol. Gastroenterol. Hepatol.* 11: 857-880.
- Zhou, X., et al. 2021. Acute kidney injury instigates malignant renal cell carcinoma via CXCR2 in mice with inactivated Trp53 and Pten in proximal tubular kidney epithelial cells. *Cancer Res.* 81: 2690-2702.
- Schaper-Gerhardt, K., et al. 2021. Sirolimus diminishes the expression of GRO- α (CXCL-1)/CXCR2 axis in human keratinocytes and cutaneous squamous cell carcinoma cells. *J. Dermatol. Sci.* 104: 30-38.
- Luo, Y., et al. 2023. Hepatocytic AP-1 and STAT3 contribute to chemotaxis in α -naphthylisothiocyanate-induced cholestatic liver injury. *Toxicol. Lett.* 373: 184-193.
- Li, Z., et al. 2023. Cross-disease characterization of fibroblast heterogeneities and their pathogenic roles in skin inflammation. *Clin. Immunol.* 255: 109742.
- Qu, X., et al. 2023. C-X-C motif chemokine 3 promotes the inflammatory response of microglia after *Escherichia coli*-induced meningitis. *Int. J. Mol. Sci.* 24: 10432.
- Xia, B., et al. 2025. Galactin-8 DNA methylation mediates macrophage autophagy through the MAPK/mTOR pathway to alleviate atherosclerosis. *Sci. Rep.* 15: 603.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.