



KC/GRO α (L-18): sc-16961

BACKGROUND

KC, the murine homologue of human GRO, is an autocrine growth factor in melanoma and is a member of the C-X-C family of chemokines, which promote chemotaxis of granulocytes and endothelia through binding to CXCR2. As a chemoattractant for monocytes and neutrophils, the KC immediate early gene product, is involved in the recruitment of hematogenous myelomonocytic cells into injured peripheral nerves, which are essential for axonal regeneration. KC expression is induced mainly in sinusoidal cells of the liver by treatment with TNF- α or IL-1 β , although it is detected to a lesser extent in hepatocytes. Members of the C-X-C family of cytokines play roles in inflammatory, immune and wound healing responses.

REFERENCES

1. Driscoll, K.E., et al. 1995. Cloning, expression, and functional characterization of rat MIP-2: a neutrophil chemoattractant and epithelial cell mitogen. *J. Leukoc. Biol.* 58: 359-364.
2. Carroll, S.L., et al. 1998. Expression of JE (monocyte chemoattractant protein-1) is induced by sciatic axotomy in wild type rodents but not in C57BL/Wld(s) mice. *J. Neuropathol. Exp. Neurol.* 57: 915-930.
3. Kim, H.S., et al. 1999. Effects of interleukin-10 on chemokine KC gene expression by mouse peritoneal macrophages in response to *Candida albicans*. *J. Korean Med. Sci.* 14: 480-486.
4. Loukinova, E., et al. 2000. Growth regulated oncogene- α expression by murine squamous cell carcinoma promotes tumor growth, metastasis, leukocyte infiltration and angiogenesis by a host C-X-C receptor-2 dependent mechanism. *Oncogene* 19: 3477-3486.
5. Aubry, F., et al. 2000. Expression and regulation of the C-X-C-chemokines, GRO/KC and IP-10/mob-1 in rat seminiferous tubules. *Eur. Cytokine Netw.* 11: 690-698.
6. Narumi, S., et al. 2000. TNF- α is a potent inducer for IFN-inducible protein-10 in hepatocytes and unaffected by GM-CSF *in vivo*, in contrast to IL-1 β and IFN- γ . *Cytokine* 12: 1007-1016.

SOURCE

KC/GRO α (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GRO α 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-16961 P, (100 μ 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.

RESEARCH USE

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

APPLICATIONS

KC/GRO α (L-18) is recommended for detection of GRO α precursor and, to a lesser extent, mature GRO α and KC of mouse and, to a lesser extent, 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).

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 MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz MarkerTM 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 UltraCruzTM Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Clark, J.D., et al. 2007. Morphine reduces local cytokine expression and neutrophil infiltration after incision. *Mol. Pain* 3: 28.
2. He, Z., et al. 2008. Interleukin-18 binding protein transgenic mice are protected against ischemic acute kidney injury. *Am. J. Physiol. Renal Physiol.* 295: F1414-F1421.

PROTOCOLS

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