SANTA CRUZ BIOTECHNOLOGY, INC.

GCP-2 (T-16): sc-5813



BACKGROUND

Human Granulocyte Chemotactic Protein 2 (GCP-2) is a member of the ELRexpressing CXC subfamily of chemokines (ELR+-CXC) and acts as a potent chemoattractant of neutrophils in the course of acute inflammation. GCP-2 is highly produced by MG-63 osteosarcoma cells and induces neovascularization, suggesting that it may be involved in tumor development and metastasis formation. ELR+-CXC chemokines and their receptors provide multiple levels of regulation for chemokine-specific control of inflammatory processes. GCP-2 is the only ELR+-CXC chemokine, except for IL-8, that is an effective ligand for CXCR1 and CXCR2. CXCR1 and CXCR2 belong to a superfamily of G protein-coupled receptors (GPCR), whose signaling is mediated by their coupling to heterotrimeric G proteins, resulting in the exchange of GDP for GTP on the subunit of the G protein.

REFERENCES

- 1. Savarese, T.M., et al. 1992. *In vitro* mutagenesis and the search for structure-function relationship among G protein-coupled receptors. Biochem. J. 283: 1-19.
- 2. Probst, W.C., et al. 1992. Sequence alignment of the G protein-coupled receptor superfamily. DNA Cell Biol. 11: 1-20.
- Ben-Baruch, A., et al. 1995. Signals and receptors involved in recruitment of inflammatory cells. J. Biol. Chem. 270: 703-706.

CHROMOSOMAL LOCATION

Genetic locus: CXCL6 (human) mapping to 4q13.3.

SOURCE

GCP-2 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GCP-2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-5813 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GCP-2 (T-16) is recommended for detection of GCP-2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 GCP-2 siRNA (h): sc-39350, GCP-2 shRNA Plasmid (h): sc-39350-SH and GCP-2 shRNA (h) Lentiviral Particles: sc-39350-V.

Molecular Weight of GCP-2: 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





GCP-2 (T-16): sc-5813. Western blot analysis of human recombinant GCP-2.

GCP-2 (T-16): sc-5813. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tumor showing extracellular localization.

SELECT PRODUCT CITATIONS

- Pierer, M., et al. 2004. Chemokine secretion of rheumatoid arthritis synovial fibroblasts stimulated by toll-like receptor 2 ligands. J. Immunol. 172: 1256-1265.
- Sachse, F., et al. 2005. Neutrophil chemokines in epithelial inflammatory processes of human tonsils. Clin. Exp. Immunol. 140: 293-300.
- Sachse, F., et al. 2006. Induction of CXC chemokines in A549 airway epithelial cells by trypsin and staphylococcal proteases—a possible route for neutrophilic inflammation in chronic rhinosinusitis. Clin. Exp. Immunol. 144: 534-542.

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.