

# GRO Alpha Rabbit pAb

GRO Alpha Rabbit pAb Catalog # AP50881

#### **Product Information**

**Application** IHC-P, IHC-F, IF

Primary Accession
Reactivity
Human
Predicted
Mouse, Rat
Host
Rabbit
Clonality
Polyclonal
Calculated MW
10254
Physical State
Liquid

Immunogen KLH conjugated synthetic peptide derived from mouse GRO Alpha

Epitope Specificity 51-107/107

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Secreted

**SIMILARITY** Belongs to the intercrine alpha (chemokine CxC) family.

**Post-translational** N-terminal processed forms GRO-alpha(4-73), GRO-alpha(5-73) and **modifications** GRO-alpha(6-73) are produced by proteolytic cleavage after secretion from

peripheral blood monocytes.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** The GRO gene was originally identified by subtractive hybridization studies

between normal and tumorigenic Chinese hamster embryo fibroblasts. The hamster cDNA was cloned and used as a probe for cloning of the human GRO cDNA. The GROalpha gene initially cloned from T24 cells and the gene in melanoma cells encoding melanoma growth stimulating protein (MGSA) are identical. Human cells contain three closely related, but distinct GRO genes: GRO alpha, GRO beta, and GRO gamma. GRO beta and GRO gamma share 93% and 82% identity, respectively, with GRO alpha at the nucleotide level. GROs are members of the chemokine alpha family that is characterized by the separation with one amino acid of the first two cysteine residues, C-X-C, in the amino acid sequence. The GRO gene has been mapped to chromosome 4q21. In normal cells, human mRNA GRO expression is found in foreskin fibroblasts, synovial fibroblasts, chondrocytes and osteocytes. Additionally, GRO mRNA has been detected in mammary fibroblasts, mammary epithelial cells, endothelial cells, activated monocytes, macrophages, and neutrophils. Characterization of the GROalpha receptor indicates the presence of low and

high affinity receptors on human neutrophils.

## **Additional Information**

**Gene ID** 14825

Other Names Growth-regulated alpha protein, C-X-C motif chemokine 1, Platelet-derived

growth factor-inducible protein KC, Secretory protein N51, KC(5-72), Hematopoietic synergistic factor, HSF, KC-T, Cxcl1, Gro, Gro1, Mgsa, Scyb1

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

#### **Protein Information**

Name Cxcl1

**Synonyms** Gro, Gro1, Mgsa, Scyb1

**Function** Has chemotactic activity for neutrophils. Contributes to neutrophil activation

during inflammation (By similarity). Hematoregulatory chemokine, which, in vitro, suppresses hematopoietic progenitor cell proliferation. KC(5-72) shows

a highly enhanced hematopoietic activity.

Cellular Location Secreted.

### **Background**

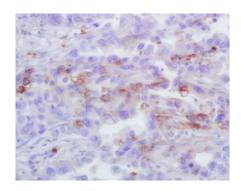
The GRO gene was originally identified by subtractive hybridization studies between normal and tumorigenic Chinese hamster embryo fibroblasts. The hamster cDNA was cloned and used as a probe for cloning of the human GRO cDNA. The GROalpha gene initially cloned from T24 cells and the gene in melanoma cells encoding melanoma growth stimulating protein (MGSA) are identical. Human cells contain three closely related, but distinct GRO genes: GRO alpha, GRO beta, and GRO gamma. GRO beta and GRO gamma share 93% and 82% identity, respectively, with GRO alpha at the nucleotide level. GROs are members of the chemokine alpha family that is characterized by the separation with one amino acid of the first two cysteine residues, C-X-C, in the amino acid sequence. The GRO gene has been mapped to chromosome 4q21. In normal cells, human mRNA GRO expression is found in foreskin fibroblasts, synovial fibroblasts, chondrocytes and osteocytes. Additionally, GRO mRNA has been detected in mammary fibroblasts, mammary epithelial cells, endothelial cells, activated monocytes, macrophages, and neutrophils. Characterization of the GROalpha receptor indicates the presence of low and high affinity receptors on human neutrophils.

#### References

Anisowicz A., et al. Proc. Natl. Acad. Sci. U.S.A. 84:7188-7192(1987). Richmond A., et al. EMBO J. 7:2025-2033(1988). Baker N.E., et al. Nucleic Acids Res. 18:6453-6453(1990). Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Wuyts A., et al. Eur. J. Biochem. 260:421-429(1999).

## **Images**

Tissue/cell: human lung carcinoma; 4%
Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3%



Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-GRO Alpha Polyclonal Antibody, Unconjugated(AP50881) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.