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GRO Alpha antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50881

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P09341
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	11301
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 modifications	N-terminal processed forms GRO-alpha(4-73), GRO-alpha(5-73) and 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	2919
Other Names	Growth-regulated alpha protein, C-X-C motif chemokine 1, GRO-alpha(1-73),

	Melanoma growth stimulatory activity, MGSA, Neutrophil-activating protein 3, NAP-3, GRO-alpha(4-73), GRO-alpha(5-73), GRO-alpha(6-73), CXCL1, GRO, GRO1, GROA, MGSA, SCYB1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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, GROA, MGSA, SCYB1
Function	Has chemotactic activity for neutrophils. May play a role in inflammation and exerts its effects on endothelial cells in an autocrine fashion. In vitro, the processed forms GRO-alpha(4-73), GRO- alpha(5-73) and GRO-alpha(6-73) show a 30-fold higher chemotactic activity.
Cellular Location	Secreted.

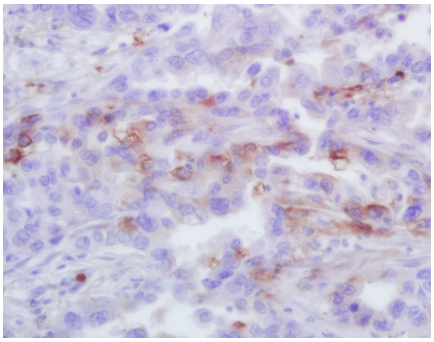
Background

Has chemotactic activity for neutrophils. May play a role in inflammation and exerts its effects on endothelial cells in an autocrine fashion. In vitro, the processed forms GRO- alpha(4-73), GRO-alpha(5-73) and GRO-alpha(6-73) show a 30-fold higher chemotactic activity.

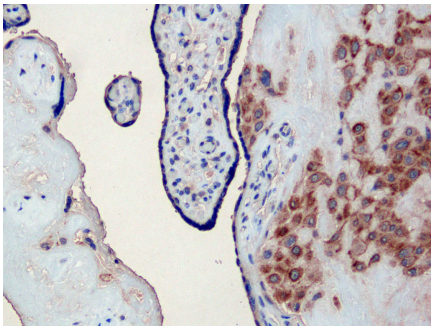
References

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).

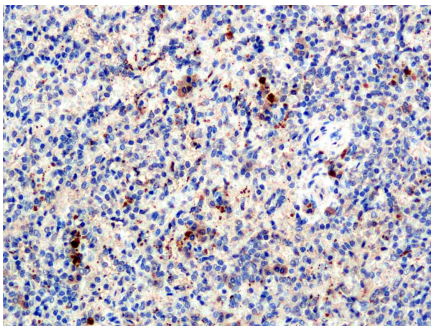
Images



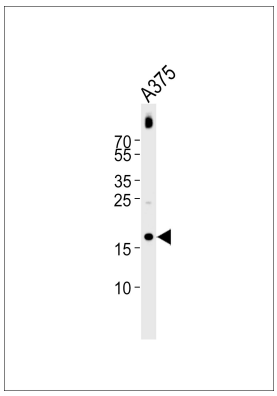
Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum) at 37℃ for 20 min; Incubation: Anti-GRO Alpha Polyclonal Antibody, Unconjugated 1:200, overnight at 4°C, followed by conjugation to the secondary antibodyand DAB staining



Paraformaldehyde-fixed, paraffin embedded (human placenta); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GRO Alpha) Polyclonal Antibody, Unconjugated at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit)instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human spleen); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GRO Alpha) Polyclonal Antibody, Unconjugated at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) instructionsand DAB staining.



Western blot analysis of lysate from A375 cell line, using GRO Alpha antibody(AP50881). AP50881 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysate at 20ug.