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GRO a Human

GRO-Alpha Human Recombinant (CXCL1)
CHK0050

Product Overview

Name	GRO a Human
Description	
GRO-Alpha Human Recombinant (CXCL1)	
Accession (Primary)	P09341
Synonyms	
Growth-regulated protein alpha, CXCL1, Melanoma growth stimulatory activity, MGSA, Neutrophil-activating protein 3, NAP-3, GRO-alpha (1-73), chemokine (C-X-C motif) ligand 1, GRO1, GROa, SCYB1, MGSA-a, MGSA alpha.	
Introduction	
Chemokine (C-X-C motif) ligand 1 (CXCL1) is a small cytokine belonging to the CXC chemokine family that was previously called GRO1 oncogene, Neutrophil-activating protein 3 (NAP-3) and melanoma growth stimulating activity, alpha (MSGA-a). It is secreted by human melanoma cells, has mitogenic properties and is implicated in melanoma pathogenesis. CXCL1 is expressed by macrophages, neutrophilsand epithelial cells, and has neutrophil chemoattractant activity. CXCL1 plays a role in spinal cord development by inhibiting the migration of oligodendrocyte precursors and is involved in the processes of angiogenesis, inflammation, wound healing, and tumorigenesis. This chemokine elicits its effects by signaling through the chemokine receptor CXCR2. The gene for CXCL1 is located on human chromosome 4 amongst genes for other CXC chemokines.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a 0.2 μm filtered concentrated (1mg/ml) solution in 20mM PB, pH 7.4, 50mM NaCl.	
Stability	
Lyophilized GRO-alpha although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL1 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	
Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.	

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Amino acid sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Ser-Val-Ala-Thr.

Biological Activity

Determined by its ability to chemoattract human peripheral blood neutrophils using a concentration range of 10.0-100.0 ng/ml.

Solubility

It is recommended to reconstitute the lyophilized CXCL1 in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

Title :Deficient inflammatory response to UV radiation in neonatal mice. Publication :Published online before print March 16, 2007, doi: 10.1189/jlb.1206729 June 2007 Journal of Leukocyte Biology vol. 81 no. 6 1352-1361 Link : GRO a prospec publication

Precautions

GRO a Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P09341)