9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

GRO a Rat

GRO-Alpha Rat Recombinant (CXCL1)
CHK0052

Product Overview

Name	GRO a Rat
Description	
GRO-Alpha Rat Recombinant (CXCL1)	
Accession (Primary)	P14095
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-α). It is secreted by human melanoma cells, has mitogenic properties and is implicated in melanoma pathogenesis. CXCL1 is expressed by macrophages, neutrophils and 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, and 150mM NaCl.	
Stability	
Lyophilized CXCL1 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

APVANELRCQ CLQTVAGIHF KNIQSLKVMP PGPHCTQTEV IATLKNGREA CLDPEAPMVQ KIVQKMLKGV PK.

Biological Activity

Determined by its ability to chemoattract rat neutrophils using a concentration range of 10-100ng/ml corresponding to a Specific Activity of 10,000-100,000IU/mg.

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.

Precautions

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

Target Information: (P14095)