

# Recombinant Human GROa / CXCL1 (GRO alpha)

Catalog Number: 100-32 Accession Number: P09341

# Specifications and Uses:

Alternate Names: CXCL1, MGSAa, mKC, NAP-3, GRO1, rCINC

#### **Description:**

Growth Regulated Protein alpha (GRO $\alpha$ ), also known as CXCL1, is a chemokine thought to have mitogenic properties and chemoattract neutrophils. Secreted by macrophages, epithelial cells, neutrophils and melanomas, GRO $\alpha$  signals through chemokine receptor, CXCR2, and has been implicated in the processes of spinal cord formation, inflammation, angiogenesis, tumorigenesis, and wound healing. Recombinant human GRO $\alpha$  is a non-glycosylated protein, containing 73 amino acids, with a molecular weight of 7.9 kDa.

Source: E.coli

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

# Formulation and Stability:

Recombinant human GROα is lyophilized from 0.02% TFA.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

#### **Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

# Protein Content and Purity (typically $\geq 98\%$ ) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

# **Endotoxin Level:**

Measured by kinetic LAL analysis and is typically  $\leq 1$  EU/µg protein.

#### Biological Activity:

The activity is determined by the ability to chemoattract human neutrophils at concentrations between 10-100 ng/mL.

#### **AA Sequence:**

ASVATELRCQ CLQTLQGIHP KNIQSVNVKS PGPHCAQTEV IATLKNGRKA CLNPASPIVK KIIEKMLNSD KSN

#### THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

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