

**BACKGROUND**

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 of 73 amino acids and a molecular weight of 7.9 kDa.

**Alternative Names:**

CXCL1, MGSAA, mKC, NAP-3, GRO1, rCINC

**Amino Acid Sequence:**

ASVATELRQC CLQTLQGIHP KNIQSVNVKS PGPHCAQTEV  
IATLKNRKA CLNPASPIVK KIIKMLNSD KSN

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant human GRO $\alpha$  is lyophilized from 0.02% TFA.

**Stability:**

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 determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

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

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

