

Rev04
Update: Mar,01,2022

DATASHEET

GRO alpha/CXCL1, Human

Cat. No.: Z03303

Product Introduction

Species	Human
Protein Construction	GRO-α (Ala35-Asn107) Accession # P09341
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/ μ g of protein by gel clotting method
Biological Activity	The EC ₅₀ value of human GRO alpha/CXCL1 on Ca ²⁺ mobilization assay in CHO-K1/G α 15/hCXCR2 cells (human G α 15 and human CXCR2 stably expressed in CHO-K1 cells) is less than 100.0 ng/ml.
Expression System	E. coli
Apparent Molecular Weight	~7.8 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : Chemokine (C-X-C motif) ligand 1 (CXCL1) is a small cytokine belonging to the CXC chemokine family that was previously called GRO1 oncogene, GRO- α , KC, neutrophil-activating protein 3 (NAP-3) and melanoma growth stimulating activity, alpha (MSG α - α). Human GRO- α , GRO- β (MIP2 α), and GRO- γ (MIP2 β) are products of three distinct, nonallelic human genes. GRO- β and GRO- γ share 90% and 86% amino acid sequence homology with GRO α , respectively. All three isoforms of GRO are CXC chemokines that can signal through the CXCR1 or CXCR2 receptors. GRO expression is inducible by serum or PDGF and/or by a variety of inflammatory mediators, such as IL-1 and TNF, in monocytes, fibroblasts, melanocytes and epithelial cells. In certain tumor cell lines, GRO is expressed constitutively. Similar to other alpha chemokines, the three GRO proteins are potent neutrophil attractants and activators. Additionally, these chemokines are also active toward basophils. All three GROs can bind with high affinity to the IL-8 receptor type B.

Synonyms : Growth Regulated Protein/Melanoma Growth Stimulatory Activity; GRO α ; MGSA α ; CXCL1; NAP-3; GRO1; KC (murine); CINC (rat)

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.