

Recombinant Human Growth Regulated Protein- α /CXCL1

#R00354

Size: 5 μ g/100 μ g/500 μ g

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

CXCL1 is belonging to the CXC chemokine family. It is encoded by the GRO gene now designated CXCL1. The gene for CXCL1 was initially discovered in hamster cells. In addition to the GRO gene, two GRO genes, GRO β and GRO γ share 90 % and 86 % amino acid sequence identity with CXCL1/GRO α . All three human GROs are members of the intercrine alpha (chemokine C-X-C) subfamily of chemokine. CXCL1 is secreted by human melanoma cells, and also expressed by macrophages, neutrophils and epithelial cells. The functional receptor for CXCL1 has been identified as CXCR2. CXCL1 has chemotactic activity for neutrophils, and plays a role in inflammation and wound healing.

AA Sequence

ASVATELRQCQLQTLQGIHPKNIQSVNVKSPGPHCAQ
TEVIATLKNRKAACLNPAPIVKKIIIEKMLNSDKSN

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	GRO α , MGSA, NAP-3
Accession	P09341
GeneID	2919
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 7.9 kDa, a single non-glycosylated polypeptide chain containing 73 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral blood neutrophils is in a concentration range of 10-50 ng/ml.
Physical	Sterile Filtered White Lyophilized

Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.
Endotoxin	Less than 1 EU/μg of rHuGRO-α/CXCL1 as determined by LAL method.