Datasheet

Cat. No. P1446

Recombinant Human Growth Regulated Protein-alpha/CXCL1

Information

Gene ID	2919
Accession #	P09341
Alternate Names	GROα, MGSA, NAP-3
Source	Escherichia coli.
M.Wt	Approximately 7.9 kDa, a single non-glycosylated polypeptide chain containing 73 amino acids.
AA Sequence	ASVATELRCQ CLQTLQGIHP KNIQSVNVKS PGPHCAQTEV IATLKNGRKA CLNPASPIVK KIIEKMLNSD KSN
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.
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 ⩽ -20 °C. Further dilutions should be made in appropriate buffered solutions.
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.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5μg	100μg	500μg
Recombinant Human Growth Regulated Protein-alpha/CXCL1	5μg	100μg	500μg

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

Quality Control

Purity	> 97 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rHuGRO-α/CXCL1 as determined by LAL method.

Description

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.

Reference

1. Haskill S, Peace A, Morris J, et al. 1990. Proc Natl Acad Sci U S A. 87:7732-6
2. Anisowicz A, Bardwell L, Sager R. 1987. Proc Natl Acad Sci U S A. 84:7188-92
3. Richmond A, Thomas HG. 1988. J Cell Biochem. 36:185-98
4. Iida N, Grotendorst GR. 1990. Mol Cell Biol. 10:5596-9
5. Tsai HH, Frost E, To V, et al. 2002. Cell. 110:373-83
6. Moser B, Clark-Lewis I, Zwahlen R, et al. 1990. J Exp Med. 171:1797-802
7. Devalaraja RM, Nanney LB, Du J, et al. 2000. J Invest Dermatol. 115:234-44.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com