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GRO-α/MGSA/CXCL1

Catalog # PVGS1481

Product Information

Primary Accession	P09341
Species	Human
Sequence	Ala35-Asn107
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Biological Activity	The EC_{50} value of human GRO alpha/CXCL1 on Ca^{2+} mobilization assay in CHO-K1/Gα15/hCXCR2 cells (human Gα15 and human CXCR2 stably expressed in CHO-K1 cells) is less than 100.0 ng/ml.
Expression System	E. coli
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_2O or PBS up to 100 □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.

Additional Information

Gene ID	2919
Other Names	Growth-regulated alpha protein, C-X-C motif chemokine 1, GRO-alpha(1-73), Melanoma growth stimulatory activity, MGSA, Neutrophil-activating protein 3, NAP-3, GRO-alpha(4-73), GRO-alpha(5-73), GRO-alpha(6-73), CXCL1, GRO, GRO1, GROA, MGSA, SCYB1
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 (MSGA-α). Human GRO-α, GRO-β (MIP2α),and GRO-γ (MIP2β)are products of three distinct, nonallelichuman genes. GRO-β and GRO-γ share 90% and 86% amino acid sequence homology with GROα, 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.

Protein Information

Name	CXCL1
Synonyms	GRO, GRO1, GROA, MGSA, SCYB1
Function	Has chemotactic activity for neutrophils. May play a role in inflammation and exerts its effects on endothelial cells in an autocrine fashion. In vitro, the processed forms GRO-alpha(4-73), GRO- alpha(5-73) and GRO-alpha(6-73) show a 30-fold higher chemotactic activity.
Cellular Location	Secreted.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.