RECOMBINANT HUMAN GROα (hCXCL1)

Catalog # 02662 **10 µg per vial**
Catalog # 02862 **50 µg per vial**

PRODUCT DESCRIPTION:

GROα is a member of the α (CXC) family of chemokines. It is produced by monocytes, neutrophils, mast cells, epithelial cells, endothelial cells, keratinocytes and tumor cells. GRO expression is inducible by serum or PDGF and/or by a variety of inflammatory mediators, such as IL-1 and TNF. GROα is a chemoattractant for neutrophils, lymphocytes, monocytes, and epidermal melanocytes.. In addition, GROα induces activation of neutrophils and basophils, has angiogenic effects, inhibits erythrocyte invasion and decreases the expression of interstitial collagen. GROα binds to IL-8R-A, IL-8R-B and DARC. Human GROα cDNA encodes a 107 amino acid residue precursor protein containing 34 N-terminal amino acid residues that are cleaved to generate the mature protein. The recombinant mature human GROα contains 73 amino acid residues and has an apparent molecular mass of 7.9 kDa.

SOURCE:

A DNA sequence encoding the mature human GROα protein was expressed in *E. coli*.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver-stain. Endotoxin level less than 0.1 ng per 1 µg of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a sterile solution in 10% acetonitrile, 0.1% TFA containing 50 µg of human serum albumin per 1 µg of cytokine.

RECONSTITUTION:

It is recommended that sterile 4 mM HCl containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 10 µg/mL of the cytokine.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted human CXCL1 can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined by ability to induce myeloperoxidase release from cytochalasin treated neutrophils, or chemotaxis of mouse BaF/3 cells transfected with human CXCR2. The ED_{50} for these effects were typically 0.15 - 0.3 µg/mL or 1 - 4 ng/mL, respectively.

THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.

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