



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

## Recombinant Human GRO-beta/MIP-2 (CXCL2)

**Catalog No.**  
228-10572

**Source:**  
*Escherichia Coli.*

### **Synonyms**

Macrophage inflammatory protein 2-alpha, MIP2-alpha, CXCL2, Growth-regulated protein beta, Gro-beta, chemokine (C-X-C motif) ligand 2, GRO2, GROb, MIP2, MIP2A, SCYB2, MGSA-b, MIP-2a, CINC-2a, MGSA beta.

### **Introduction**

Chemokine (C-X-C motif) ligand 2 (CXCL2) is a small cytokine belonging to the CXC chemokine family that is also called macrophage inflammatory protein 2-alpha (MIP2-alpha), Growth-regulated protein beta (Gro-beta) and Gro oncogene-2 (Gro-2). CXCL2 is 90% identical in amino acid sequence as a related chemokine, CXCL1. This chemokine is secreted by monocytes and macrophages and is chemotactic for polymorphonuclear leukocytes and hematopoietic stem cells. The gene for CXCL2 is located on human chromosome 4 in a cluster of other CXC chemokines. CXCL2 mobilizes cells by interacting with a cell surface chemokine receptor called CXCR2.

### **Description**

GRO-Beta Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 73 amino acids and having a molecular mass of 7908 Dalton. The CXCL2 is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

### **Formulation**

The protein was lyophilized with no additives.

### **Purity**

Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

### **Solubility**

It is recommended to reconstitute the lyophilized GRO-beta Human in sterile 18MΩ-cm H<sub>2</sub>O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### ***Stability***

Lyophilized CXCL2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL2 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### ***Amino acid sequence***

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Pro-Leu-Ala-Thr.

### ***Biological Activity***

The Biological activity is calculated by its ability to chemoattract CXCR2 transfected 293 cells using 10.0-100.0 ng/ml.

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