

**California Bioscience** 

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# **Product Datasheet**

Product Name	Recombinant Human GRO-Beta (CXCL2)
Cata No	CB500044
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.

#### Description

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.

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.

#### **Biological Activity**

The Biological activity is calculated by its ability to Sterile Filtered White lyophilized (freeze-dried) powder. chemoattract CXCR2 transfected 293 cells using 10.0-100.0 ng/ml.

#### Purity

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

### Formulation

The protein was lyophilized with no additives. **Reconstitution** 

It is recommended to reconstitute the lyophilized GRO-beta Human in sterile  $18M\Omega$ -cm H2O not less than  $100\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### 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).

#### Sequence

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

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