

## Recombinant Mouse Chemokine (C-X-C Motif) Ligand 2

Cat. No. Cxcl2-38M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Mouse GRO-Beta also called mouse MIP-2 produced in <i>E. Coli</i> is a single, non-glycosylated, polypeptide chain containing 73 amino acids and having a molecular mass of 7849 Dalton. The GRO-Beta is purified by proprietary chromatographic techniques.
<b>Species</b>	Mouse
<b>Source</b>	E.coli
<b>Description</b>	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.
<b>Amino Acid Sequence</b>	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Val-Val-Ala-Ser.
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

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<b>Formulation</b>	The protein was lyophilized with no additives.
<b>Solubility</b>	It is recommended to reconstitute the lyophilized GRO-beta Mouse in sterile 18MΩ-cm H <sub>2</sub> O not less than 100g/ml, which can then be further diluted to other aqueous solutions.
<b>Biological Activity</b>	The Biological activity was determined by measuring the dose dependent mobilization of intracellular calcium (calcium flux) with human neutrophils. Significant calcium mobilization is observed with 5 ng/ml of recombinant mouse MIP-2.
<b>Protein content</b>	Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.015 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a standard solution of GRO-as a Reference Standard.
<b>Storage</b>	Lyophilized GRO-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.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">Cxcl2 chemokine (C-X-C motif) ligand 2 [ Mus musculus ]</a>
<b>Synonyms</b>	Cxcl2; chemokine (C-X-C motif) ligand 2; GROb; Gro2; Mip2; Scyb; MIP-2; Scyb2; MIP-2a; Mgsa-b; CINC-2a; small inducible cytokine subfamily, member 2; MIP2
<b>Gene ID</b>	<a href="#">20310</a>
<b>mRNA Refseq</b>	<a href="#">NM_009140</a>

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<b>Protein Refseq</b>	NP_033166
<b>UniProt ID</b>	P10889
<b>Chromosome Location</b>	5 E1; 5 51.0 cM
<b>Pathway</b>	Chemokine signaling pathway; Cytokine-cytokine receptor interaction
<b>Function</b>	chemokine activity; cytokine activity

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