

## Recombinant Murine Macrophage Inflammatory Protein-2/CXCL2

### Information

<b>Gene ID</b>	20310
<b>Accession #</b>	P10889
<b>Alternate Names</b>	
<b>Source</b>	Escherichia coli.
<b>M.Wt</b>	Approximately 7.8 kDa, a single, non-glycosylated polypeptide chain containing 73 amino acids.
<b>AA Sequence</b>	AVVASELRCQ CLKTLPRVDF KNIQSLSVTP PGPHCAQTEV IATLKGGQKV CLDPEAPLVQ KIIQKILNKG KAN
<b>Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Biological Activity</b>	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human neutrophils is in a concentration range of 1.0-10 ng/ml.
<b>Shipping Condition</b>	Gel pack.
<b>Handling</b>	Centrifuge the vial prior to opening.
<b>Usage</b>	For Research Use Only! Not to be used in humans.

### Components and Storage

Components	5µg	100µg	500µg
Recombinant Murine Macrophage Inflammatory Protein-2/CXCL2	5µg	100µg	500µg

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- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

## Quality Control

Purity	> 97 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rMuMIP-2/CXCL2 as determined by LAL method.

## Description

Murine CXCL2, also named MIP-2, is belonging to the CXC chemokine family. It is encoded by the gene CXCL2. CXCL2 shares 90 % amino acid sequence with CXCL1/GRO  $\alpha$ . It is member of the intercrine alpha (chemokine C-X-C) subfamily of chemokines. This chemokine is secreted from a murine macrophage cell line. The functional receptor for CXCL2 has been identified as CXCR2. CXCL2 is chemotactic for polymorphonuclear leukocytes and hematopoietic stem cells. Similar to other GRO proteins, CXCL2 is potent neutrophil attractants and activators. In addition, it is also active toward basophils. The amino acid sequence of murine CXCL2 is 60 % identical to human CXCL2.

## Reference

1. Haskill S, Peace A, Morris J, et al. 1990. Proc Natl Acad Sci U S A. 87:7732-6
2. Tsai HH, Frost E, To V, et al. 2002. Cell. 110:373-83
3. Wolpe SD, Sherry B, Juers D, et al. 1989. Proc Natl Acad Sci U S A. 86:612-6
4. Iida N, Grotendorst GR. 1990. Mol Cell Biol. 10:5596-9
5. Pelus LM, Fukuda S. 2006. Exp Hematol. 34:1010-20.

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