

## GRO- $\beta$ /MIP-2/CXCL2, Rat

**Cat. No.:** Z02920-1

**Size:** 1.0 mg

**Synonyms:** Macrophage inflammatory protein 2-alpha, MIP2-alpha, CXCL2, Growth-regulated protein beta, Gro-beta, chemokine (C-X-C motif) ligand 2, GRO2, GRO $\beta$ , MIP2, MIP2A, SCYB2, MGSA-b, MIP-2a, CINC-2a, MGSA beta, CINC-3.

### Description:

Rat CXCL2 also named CINC-3, is belonging to the CXC chemokine family. It is encoded by the gene CXCL2. CXCL2 shares 90% amino acid sequence with CXCL1/GRO $\alpha$ . CINC-3 is member of the intercrine alpha (chemokine C-X-C) subfamily of chemokines. This chemokine is expressed by cytokine-stimulated rat alveolar macrophages and fibroblasts. 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 rat CXCL2 is 88% identical to murine CXCL2.

### Amino Acid Sequence:

00001 VVASELRCQ CLTTLPRVDF KNIQSLTVP PGPCHAQTEV  
00041 IATLKDGEV CLNPEAPLVQ RIVQKILNKG KAN

**Source:** *E. coli*

**Species:** Rat

**Biological Activity:** Fully biologically active when compared to standard. Determined by its ability to chemoattract total human neutrophils using a concentration range of 1.0-10.0 ng/ml.

**Molecular Weight:** Approximately 7.9 kDa, a single, non-glycosylated polypeptide chain containing 73 amino acids.

**Formulation:** Lyophilized from a 0.2  $\mu$ m filtered concentrated solution in PBS, pH 7.4.

**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Reconstitution:** 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  $\leq -20^{\circ}\text{C}$ . Further dilutions should be made in appropriate buffered solutions.

**Purity:** >98% by SDS-PAGE and HPLC analyses.

**Endotoxin Level:** Less than 1 EU/ $\mu$ g of rRtMIP-2/CXCL2 as determined by LAL method.

**Storage:** This lyophilized preparation is stable at 2-8 $^{\circ}\text{C}$ , but should be kept at -20 $^{\circ}\text{C}$  for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 $^{\circ}\text{C}$ . For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 $^{\circ}\text{C}$  to -70 $^{\circ}\text{C}$ . Avoid repeated freeze/thaw cycles.