

Recombinant Rat Cytokine-induced Neutrophil Chemoattractant 3/CXCL2

#R00444

Size: 5 µg/100 µg/500 µg

Stability & Storage

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Rat CXCL2 also named CINC-3, belongs to the CXC chemokine family. It is encoded by the gene CXCL2 and shares 90 % amino acid sequence with CXCL1/GROα. It 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.

AA Sequence

VVASELRCQCLTTLPRVDFKNIQSLTVTPPGPHCAQ
TEVIATLKDGHEVCLNPEAPLVQRIVQKILNKGKAN

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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	MIP-2
Accession	P30348
GeneID	114105
Species	Rat
Source	Escherichia coli.
Molecular Weight	Approximately 7.9 kDa, a single, non-glycosylated polypeptide chain containing 73 amino acids.
Purity	> 98 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using rat neutrophils is in a concentration range of 10-100 ng/ml.
Physical	Sterile Filtered White Lyophilized

Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/μg of rRtCINC-3/CXCL2 as determined by LAL method.