

Recombinant Rat Cytokine-induced Neutrophil Chemoattractant 3/CXCL2

Information

Gene ID	114105
Accession #	P30348
Alternate Names	MIP-2
Source	Escherichia coli.
M.Wt	Approximately 7.9 kDa, a single, non-glycosylated polypeptide chain containing 73 amino acids.
AA Sequence	VVASELRCQ CLTTLPRVDF KNIQSLTVTP PGPHCAQTEV IATLKDGHEV CLNPEAPLVQ RIVQKILNKG KAN
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
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.
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.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5µg	100µg	500µg
Recombinant Rat Cytokine-induced Neutrophil Chemoattractant 3/CXCL2	5µg	100µg	500µg

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- 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	> 98 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/ μ g of rRtCINC-3/CXCL2 as determined by LAL method.

Description

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/GRO α . 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.

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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