Technical Data Sheet

Flogen® Recombinant Rat GRO-beta/MIP-2/CXCL2 (rRtGRO-β/MIP-2/CXCL2)

Catalog Number:	PGR0241-002
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 7.9 kDa, a single, non-glycosylated polypeptide chain containing 73 amino acids.
Quantity:	5μg/25μg/1mg
AA Sequence:	VVVASELRCQ CLTTLPRVDF KNIQSLTVTP PGPHCAQTEV IATLKDGHEV CLNPEAPLVQ RIVQKILNKG KAN
Purity:	>98% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} determined by a chemotaxis bioassay using total human neutrophils is less than 10 ng/ml, corresponding to a specific activity of $> 1.0 \times 10^5$ IU/mg.
Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1EU/μg of rRtMIP-2/CXCL2 as determined by LAL method.
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.
Storage:	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. **Avoid repeated freeze/thaw cycles**.
Usage:	For research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.

Rat GRO-beta/MIP-2/CXCL2

Rat GRO-beta/MIP-2/CXCL2 has been found to be expressed by cytokine stimulated rat alveolar macrophages and fibroblasts. Based on its protein and DNA sequences, GRO-beta/MIP-2 is a member of the alpha (CXC) subfamily of chemokines.

The protein sequence of rat GRO-beta/MIP-2 shares approximately 88% identity with murine MIP2. Characteristic of ELR containing CXC chemokines, GRO-beta/MIP-2 is known to be a potent chemotactic factor for rat neutrophils in vitro and in vivo.