

Recombinant Murine KC/CXCL1

#R00408

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

Murine CXCL1, also known as KC, is belonging to the CXC chemokine family. It is encoded by the GRO gene now designated CXCL1. The gene for CXCL1 was initially discovered in mouse fibroblasts by plateletderived growth factor. KC is member of the intercrine alpha (chemokine C-X-C) subfamily of chemokines. It is secreted by human melanoma cells, and also expressed by macrophages, neutrophils and epithelial cells. The functional receptor for CXCL1 has been identified as CXCR2. CXCL1 has chemotactic activity for neutrophils, and plays a role in inflammation and wound healing. Amino acid sequence of murine CXCL1 is approximately 60 % identical to the human CXCL1. KC was found to be involved in monocyte arrest on atherosclerotic endothelium and may also play a pathophysiological role in Alzheimer's disease.

AA Sequence

APIANELRCQCLQTMAGIHLKNIQSLKVLPSGPHCTQ
TEVIATLKNGREACLDPEAPLVQKIVQKMLKGVPK

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	C-X-C motif chemokine 1, GRO-alpha, Platelet-derived growth factor-inducible protein, KC, Secretory protein N51
Accession	P12850
GeneID	14825
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 7.8 kDa, a single non-glycosylated polypeptide chain containing 72 amino acid residues.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using

human peripheral blood
neutrophils is in a concentration
range of 10-100 ng/ml.

**Physical
Appearance** Sterile Filtered White lyophilized
(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
rMuKC/CXCL1 as determined by
LAL method.
