

Datasheet Cat. No. P1481

Recombinant Murine KC/CXCL1

Information

| Gene ID | 14825 | | | |
|------------------------|---|--|--|--|
| Accession # | P12850 | | | |
| Alternate Names | C-X-C motif chemokine 1, GRO-alpha, Platelet-derived growth factor-inducible protein, KC, Secretory protein N51 | | | |
| Source | Escherichia coli. | | | |
| M.Wt | Approximately 7.8 kDa, a single non-glycosylated polypeptide chain containing 72 amino acid residues. | | | |
| AA Sequence | APIANELRCQ CLQTMAGIHL KNIQSLKVLP SGPHCTQTEV IATLKNGREA CLDPEAPLVQ KIVQKMLKGV PK | | | |
| 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 \leq -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 human peripheral blood 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 | | | | |

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| Components | 5µg | 100µg | 500µg |
|-----------------------------|-----|-------|-------|
| Recombinant Murine KC/CXCL1 | 5µg | 100µg | 500µg |

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- 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

| Quality Control | (Openant) | el Quan |
|-----------------|--|----------------------|
| Purity | > 97 % by SDS-PAGE and HPLC analyses. | Reconstruction |
| Endotoxin | Less than 1 EU/ $_{\mu}$ g of rMuKC/CXCL1 as deter | mined by LAL method. |

Description

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.

PEABle

Reference

- 1. Haskill S, Peace A, Morris J, et al. 1990. Proc Natl Acad Sci U S A. 87:7732-6
- 2. Anisowicz A, Bardwell L, Sager R. 1987. Proc Natl Acad Sci U S A. 84:7188-92
- 3. Richmond A, Thomas HG. 1988. J Cell Biochem. 36:185-98
- 4. lida N, Grotendorst GR. 1990. Mol Cell Biol. 10:5596-9
- 5. Tsai HH, Frost E, To V, et al. 2002. Cell. 110:373-83
- 6. Moser B, Clark-Lewis I, Zwahlen R, et al. 1990. J Exp Med. 171:1797-802
- 7. Devalaraja RM, Nanney LB, Du J, et al. 2000. J Invest Dermatol. 115:234-44.

