Recombinant Murine Breast and Kindey-expressed Chemokine/CXCL14

#R00419

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

Chemokine (C-X-C motif) ligand 14 (CXCL14), also named BRAK, is a small cytokine belonging to the CXC chemokine family. It is constitutively expressed at the mRNA level in certain normal tissues and it possesses chemoattractive activity for activated macrophages, immature dendritic cells and natural killer cells. According to the relevant literature, CXCL14 is associated with tumor development. Moreover, recent evidence revealed that CXCL14 participates in glucose metabolism, feeding behaviour-associated neuronal circuits, and anti-microbial defense. Although CXCL14 receptors have not yet been identified, the intracellular activity of CXCL14 in breast cancer cells suggests that the CXCL14 receptor(s) and signal transduction pathway(s) may be different from those of conventional CXC-type chemokines. Recombinant murine CXCL14 contains 77 amino acid residues and it shares 97 % and 99 % a.a. sequence identity with human and rat CXCL14.

AA Sequence

SKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIVT TKSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKR RVYEE

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	B-cell and Monocyte-activating Chemokine, Chemokine BRAK, Kidney-expressed Chemokine CXC, MIP-2G, Small-inducible Cytokine B14
Accession	Q9WUQ5
GeneID	57266
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 9.4 kDa, a single non-glycosylated polypeptide chain containing 77amino acids.
Purity	> 95 % 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 monocytes is in a concentration range of 1.0-10 ng/ml.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, 400 mM NaCl, pH 7.4, 5 % trehalose.
Endotoxin	Less than 1 EU/μg of rMuBRAK/CXCL14 as determined by LAL method.