BRAK (CXCL14), human recombinant (rHuBRAK)

Catalog No: 97424
Lot No: XXXXX
Source: *E. coli*
Synonyms: C-X-C motif chemokine 14, Small-inducible cytokine B14, Chemokine BRAK, Bolekine, NJAC, KS1, Kec, BMAC, MIP-2g, SCYB14, CXCL14, BRAK, MGC10687

Background

CXCL14 is involved in immunoregulatory and inflammatory processes. BRAK protein is structurally related to the CXC (Cys-X-Cys) subfamily of cytokines. CXCL14 displays chemotactic activity for monocytes but not for lymphocytes, dendritic cells, neutrophils or macrophages. CXCL14 is involved in the homeostasis of monocyte-derived macrophages.

Description

CXCL14 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 77 amino acids and having a molecular mass of 9.4 kDa. CXCL14 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

CXCL14 was lyophilized after extensive dialysis against 20 mM Tris-HCl, pH 8.5 and 1 M NaCl.

Solubility

It is recommended to reconstitute the lyophilized CXCL14 in sterile 18 MΩ-cm H_2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized CXCL14, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL14 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Lys-Cys-Lys-Cys.

Activity

The ED50 of CXCL14 as determined by its ability to induce calcium flux of prostaglandin E2 treated THP1 human acute monocytic leukemia cells was 1.0 - 10.0 ng/ml.

Usage

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