

# Recombinant Rat Breast and Kidney-expressed Chemokine/CXCL14 (Rat BRAK/CXCL14)

## Product Information

| Product Name  | Cat#      | Size   |
|---|-----------|--------|
| Recombinant Rat Breast and Kidney-expressed Chemokine/CXCL14<br>(Rat BRAK/CXCL14) | 90943ES08 | 5 µg   |
|   | 90943ES60 | 100 µg |
|   | 90943ES76 | 500 µg |

## Product Description

Chemokine (C-X-C motif) ligand 14 (CXCL14), also named BRAK, is a small cytokine belonging to the CXC chemokine family. Recombinant mouse CXCL14 contains 77 amino acid residues and it shares 97 % and 99 % a.a. sequence identity with human and rat CXCL14. CXCL14 serves as a chemoattractant for activated macrophages, immature dendritic cells and natural killer cells, as well as an antiangiogenic factor by preventing the migration of endothelial cells. CXCL14 also exerts an inhibitory effect on the CXCL12/CXCR4 signaling pathway, which is involved in the maintenance of T-helper (Th)2 bias, and promotes Th1 immune response under the physiological and pathological conditions. CXCL14 has been shown to be a highly selective chemoattractant for monocytes that have been treated with prostaglandin E2 or forskolin, agents that activate adenylate cyclase.

## Product Properties

|                            |   |
|----------------------------|---|
| <b>Synonyms</b>            | B-cell and Monocyte-activating Chemokine, Chemokine BRAK, Kidney-expressed Chemokine CXC, CXCL14, MIP-2G, Small-inducible Cytokine B14  |
| <b>Accession</b>           | Q8K453  |
| <b>GeneID</b>              | 306748  |
| <b>Source</b>              | E.coli-derived rat BRAK/CXCL14 protein, Ser23-Glu99.  |
| <b>Molecular Weight</b>    | Approximately 9.4 kDa.  |
| <b>AA Sequence</b>         | SKCKCSRKGP KIRYSDVKKL EMKPKYPHCE EKMVIITTKS MSRYRGQEHK LHPKLQSTKR<br>FIKWYNWNE KRRVYEE  |
| <b>Tag</b>                 | None  |
| <b>Physical Appearance</b> | Sterile Filtered White lyophilized (freeze-dried) powder.   |
| <b>Purity</b>              | >95% by SDS-PAGE and HPLC analyses.   |
| <b>Biological Activity</b> | The biological activity determined by a chemotaxis bioassay using human monocytes is in a concentration range of 1.0-10 ng/mL. Fully biologically active when compared to standard.   |
| <b>Endotoxin</b>           | < 0.1 EU per 1µg of the protein by the LAL method.  |
| <b>Formulation</b>         | Lyophilized from a 0.2 µm filtered concentrated solution in 30% Acetonitrile and 0.1% TFA.<br>We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.  |
| <b>Reconstitution</b>      | 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. |

## Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

### **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!