

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

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	241-14
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 9.4 kDa, a single non-glycosylated polypeptide chain containing 77 amino acids.
Quantity:	5µg/20µg/1000µg
AA Sequence:	SKCKCSRKGP KIRYSDVKKL EMKPKYPHCE EKMVIITTKS MSRYRGQEH LHPKLQSTKR FIKWYNAWNE KRRVYEE
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 30 % Acetonitrile and 0.1 % TFA.
Endotoxin:	Less than 0.1 EU/µg of rRtBRAK/CXCL14 as determined by LAL method.
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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 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.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Rat Breast and Kidney-expressed Chemokine/CXCL14

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 rat CXCL14 contains 77 amino acid residues and it shares 99 % a.a. sequence identity with human and murine CXCL14.