

Recombinant Rat Lymphotactin/XCL1 (rRtLymphotactin/XCL1)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

242-01

Source:

Escherichia coli.

Molecular Weight:

Approximately 10.0 kDa, a single non-glycosylated polypeptide chain containing 93 amino acids.

Quantity:

5μg/20μg/1000μg

AA Sequence:

VGTEVLQESI CVSLRTQRLP VQKIKTYTIK EGAMRAVIFV TKRGLRICAD PQAKWVKTAI

KTVDGRASAS KSKAETIPTQ AQRSASTAVT LTG

Purity:

> 97 % by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED₅₀ as determined by a chemotaxis

bioassay using human XCR1 transfected murine BaF3 cells is less than 100 ng/ml, corresponding to a

specific activity of $> 1.0 \times 10^4$ IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

Endotoxin:

Less than 0.1 EU/µg of rRtLymphotactin/XCL1 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 \leq -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.

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 Lymphotactin/XCL1

Chemokine (C motif) ligand (XCL1), as known as lymphotactin, is the only known member of the C-chemokine family and signals through the receptor XCR1, formally known as GPR5. The expression of lymphotactin is abundant in some activated T cells such as activated CD8+ T cells and other class I MHC restricted T cells. It is found in high levels in spleen, thymus, intestine and peripheral blood leukocytes, and at lower levels in lung, prostate gland and ovary. XCL1 induces its chemotactic function by binding to a chemokine receptor called XCR1. Recombinant Rat XCL1 which is a single non-glycosylated polypeptide chains containing 93 amino acids and it shares approximately 57 % and 82 % amino acid sequence homology with the human and murine XCL1.

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