

# Recombinant Rat Lymphotactin/XCL1 (rRtLymphotactin/XCL1)

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	242-01
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 10.0 kDa, a single non-glycosylated polypeptide chain containing 93 amino acids.
<b>Quantity:</b>	5µg/20µg/1000µg
<b>AA Sequence:</b>	VGTEVLQESI CVSLRTQRLP VQKIKTYTIK EGAMRAVIFV TKRGLRICAD PQAKWVKTAI KTVDGRASAS KSKAETIPTQ AQRSASTAVT LTG
<b>Purity:</b>	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> 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 × 10 <sup>4</sup> IU/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rRtLymphotactin/XCL1 as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***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<sup>+</sup> 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.