

**Recombinant Rat Macrophage Inflammatory
Protein-1 beta/CCL4
(rRtMIP-1 β /CCL4)
ChemWhat Technical Data Sheet (TDS)**

Catalog Number:	244-04
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 7.8 kDa, a single non-glycosylated polypeptide chain containing 69 amino acids.
Quantity:	5 μ g/20 μ g/1000 μ g
AA Sequence:	APIGSDPPTS CCFSYTSRKI HRNFVMDYYE TSSLCSQPAV VFLTKKGRQI CADPSEPWVN EYVNDLELN
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 peripheral blood monocytes is in a concentration range of 10-1000 ng/ml.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in 2 \times PBS, pH 7.4, 3 % trehalose.
Endotoxin:	Less than 1 EU/ μ g of rRtMIP-1 β /CCL4 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 $^{\circ}$ 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 $^{\circ}$C as supplied.● 1 month, 2 to 8 $^{\circ}$C under sterile conditions after reconstitution.● 3 months, -20 to -70 $^{\circ}$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 Macrophage Inflammatory Protein-1 beta/CCL4

Chemokine (C-C motif) ligand 4 encoded by the CCL4 gene, also known as macrophage inflammatory protein-1 β (MIP-1 β) is a CC chemokine with specificity for CCR5 receptors and it is a major HIV-suppressive factor produced by CD8⁺ T cells. In addition, it is a chemoattractant for natural killer cells, monocytes and a variety of other immune cells. Recombinant CCL4 induces a dose-dependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV). Furthermore, recombinant rat CCL4 contains 69 amino acids and it shares 80 % and 86 % a.a. sequence identity with human and murine CCL4. Both human and murine MIP-1 α and MIP-1 β are active on human and murine hematopoietic cells.