Technical Data Sheet

Recombinant Rat Macrophage Inflammatory Protein-1 beta/CCL4 (rRtMIP-1β/CCL4)

Rat Macrophage Inflammatory Protein-1 beta/CCL4

Chemokine (C-C motif) ligand 4 encoded by the CCL4 gene, also known as macrophage inflammatory protein-1β (MIP-1β) 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-1α and MIP-1β are active on human and murine hematopoietic cells.

Catalog Number:	RC355-15
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 7.8 kDa, a single non-glycosylated polypeptide chain containing 69 amino acids.
Quantity:	5μg/20μg/1000μg
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 μm filtered concentrated solution in 2 × PBS, pH 7.4, 3 % trehalose
Endotoxin:	Less than 1EU/μg of rRtMIP-1β/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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for

	long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.
Usage:	This material is offered by Bio Basic Inc for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.