

Macrophage Inflammatory Protein-1 beta (MIP-1 $\beta$ ), also known as CCL4, is produced by macrophages and thought to induce inflammatory responses, including superoxide production by neutrophils. MIP-1a and MIP-1 $\beta$  can exist as a naturally occurring heterodimer has been shown to have antiviral activity against HSV-1.

Recombinant mouse MIP-1 $\beta$  is a non-glycosylated protein, containing 69 amino acids and having a molecular mass of 7.9 kDa.

## **Alternative Names:**

CCL4, ACT-2

## Amino Acid Sequence:

APMGSDPPTS CCFSYTSRQL HRSFVMDYYE TSSLCSKPAV VFLTKRGRQI CANPSEPWVT EYMSDLELN

# **TECHNICAL INFORMATION**

Source: E.coli

#### **Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

#### Formulation:

Recombinant mouse MIP-1  $\boldsymbol{\beta}$  is lyophilized with no additives.

#### Stability:

Lyophilized product is very stable at  $-20^{\circ}$ C. Reconstituted material should be aliquoted and frozen at  $-20^{\circ}$ C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

#### **Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

#### **Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

## **Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

## **Biological Activity:**

The activity is calculated by the ability to chemoattract human blood monocytes at 20-100 ng/ml.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

