

**Product:** **Recombinant Mouse MIP-1 $\beta$  (CCL4)**  
**Cat #: 300-334P**  
Powder

Description	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-1 $\alpha$ and MIP-1 $\beta$ can exist as a naturally occurring heterodimer has been shown to have antiviral activity against HSV-1. Alternate names: CCL4, ACT-2
MW	Non-glycosylated protein, containing 69 amino acids, with a molecular weight of 7.9 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant mouse MIP-1 $\beta$ is lyophilized with no additives.
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.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity is determined by the ability to chemoattract human PBMCs or THP-1 cells at 20-100 ng/mL.
Endotoxin Level	Measured by kinetic LAL analysis and is typically $\leq$ 1 EU/ $\mu$ g protein.
AA Sequence	APMGSDPPTS CCFSYTSRQL HRSFVMDYYE TSSLCSKPAV VFLTKRGRQI CANPSEPWVT EYMSDLELN

Purity greater than 95% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**