

## GFH134 Recombinant Human MIP-1 $\beta$ / CCL4

### Description

Macrophage Inflammatory Protein 1  $\beta$  (MIP-1  $\beta$ ), also known as CCL4, is produced by macrophages and functions as a mitogen-inducible cytokine. MIP-1  $\beta$  signals through the chemokine receptor CCR5 to chemoattract immune cells. MIP-1  $\beta$  induces inflammatory responses, including neutrophil superoxide production. The MIP-1  $\alpha$  and MIP-1  $\beta$  heterodimer exhibits antiviral activity against the human immunodeficiency virus 1 (HIV-1).

<b>Length</b>	69 aa
<b>Molecular Weight</b>	7.8 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P13236
<b>Purity</b>	$\geq$ 95% determined by reducing and non-reducing SDS-PAGE

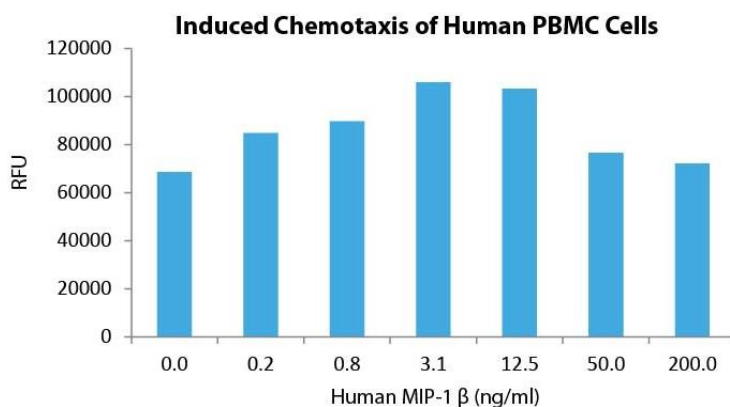
### Specifications

<b>Alternative Names</b>	Monocyte Chemotactic Protein 1, CCL2, JE, MCAF
<b>Biological Activity</b>	Human MIP-1 $\beta$ is fully biologically active when compared to standard. The activity is determined by the ability to induce chemotaxis of human PBMC cells.
<b>Endotoxin Level</b>	$\leq$ 1.00 EU/ $\mu$ g as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	APMGSDPPTA CCFSYTARKL PRNFVVDYYE TSSLCSQPAV VFQTRKRGKQV CADPSESWSVQ EYVYDLELN

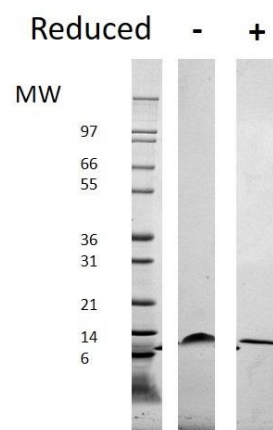
### Preparation and Storage

<b>Reconstitution</b>	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 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Induced chemotaxis of human PBMC cells assay for Human MIP-1  $\beta$ . Cells that migrated were counted using a luminescent substrate. Migration over basal levels was reported in response to Human MIP-1  $\beta$  starting at 3.1 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1  $\mu$ g of protein was loaded in each lane. Human MIP-1  $\beta$  has a predicted Mw of 7.8 kDa.