

GFH136 Recombinant Human MIP-4 / CCL18

Description

Macrophage Inflammatory Protein 4 (MIP-4), also known as CCL18, is a chemokine expressed in the lymph nodes, lungs, placenta, and bone marrow. MIP-4 receptors include the chemokine receptor 8 (CCR8), the G protein-coupled receptor 30 (GPR30), and the phosphatidylinositol transfer protein membrane-associate 3 (PITPNM3). MIP-4 acts as a chemoattractant for naive T cells, CD4+ T cells, CD8+ T cells, and nonactivated lymphocytes. Further, MIP-4 promotes breast cancer metastasis and attenuates the activation of acute lymphocytic leukemia B cells.

Length	69 aa
Molecular Weight	7.9 kDa
Source	E. coli
Accession Number	P55774
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

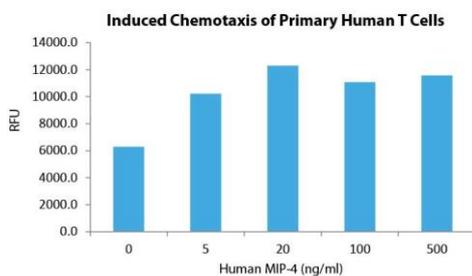
Specifications

Alternative Names	Monocyte Chemotactic Protein 1, CCL2, JE, MCAF
Biological Activity	Human MIP-4 is fully biologically active when compared to standard. The activity is determined by the ability to induce chemotaxis of primary human T cells.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	AQVGTNKELC CLVYTSWQIP QKFLVDYSET SPQC PKPGVI LLTKRGRQIC ADPNKKWVQK YISDLKLNA

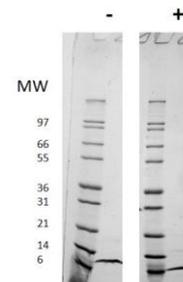
Preparation and Storage

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 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	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 primary human T cells assay for Human MIP-4. Cells that migrated were counted using a luminescent substrate. Migration over basal levels was reported in response to Human MIP-4 starting at 5 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human MIP-4 has a predicted Mw of 7.9 kDa.