

Human MIP3 beta protein, His tag (active)

Cat. No. GTX00424-pro

Applications Functional Assay**Species** Human**Package**

10 µg

Applications

Application Note

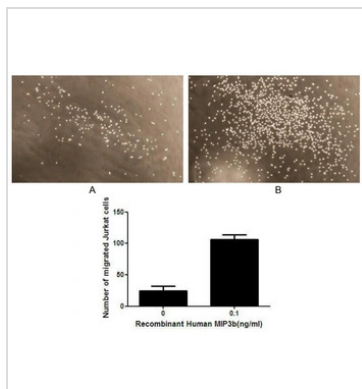
Macrophage Inflammatory Protein 3 Beta (MIP3b) is a small cytokine belonging to the CC chemokine family that is also known as EBI1 ligand chemokine (ELC) and Chemokine C-C motif ligand 19 (CCL19). This chemokine elicits its effects on its target cells by binding to the chemokine receptor chemokine receptor CCR7. It attracts certain cells of the immune system, including dendritic cells and antigen-engaged B cells, CCR7 central-memory T-Cells. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of recombinant human MIP3b on the Jurkat cell line. Briefly, Jurkat cells were seeded into the upper chambers (150 µl cell suspension, 10⁶ cells/ml in RPMI-1640 with FBS free) and MIP3b (0.01, 0.1, 1, 10, 100, and 1000 ng/ml diluted separately in serum free RPMI-1640) was added in lower chamber with a polycarbonate filter (8 µm pore size) used to separate the two compartments. After incubation at 37°C with 5% CO₂ for 3h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (×100) and the number of migrated cells were counted at high magnification (×400) randomly (five fields for each filter). MIP3b is able to induce migration of Jurkat cells, and the migrated cells were counted at high magnification (×400). The optimum chemotaxis of recombinant human MIP3b occurs at 0.1-1 ng/ml.

Observed MW (kDa) 14 kDa.

Properties

Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris (pH8.0) and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris (pH8.0), 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Gly22~Ser98 (NP_006265.1)**Expression System** E. coli**Purity** > 97%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

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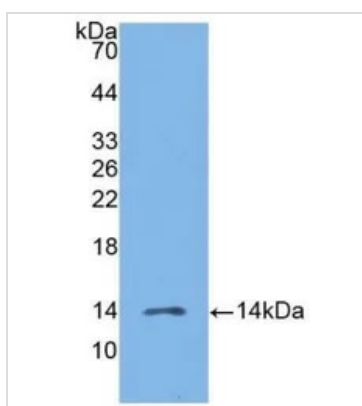
DATA IMAGES

GTx00424-pro Functional Assay Image

The chemotactic effect of GTX00424-pro Human MIP3 beta protein (active).

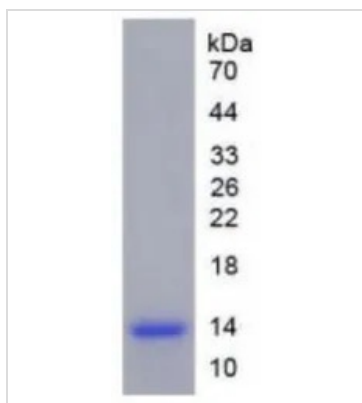
Upper: (A) Jurkat cells were seeded into the upper chambers and serum free RPMI-1640 without MIP3b was added in lower chamber, then cells in lower chamber were observed at low magnification ($\times 100$) after incubation for 3hrs.

(B) Jurkat cells were seeded into the upper chambers and serum free RPMI-1640 with 0.1 ng/ml MIP3b was added in lower chamber, then cells in lower chamber were observed at low magnification ($\times 100$) after incubation for 3hrs.

Lower: The number of migrated cells were counted at high magnification ($\times 400$) randomly (five fields for each filter).


GTx00424-pro Image

WB analysis of GTX00424-pro Human MIP3 beta protein (active).


GTx00424-pro Image

SDS-PAGE analysis of GTX00424-pro Human MIP3 beta protein (active).



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