

Macrophage Inflammatory Protein 1 Alpha (MIP1a) Active Protein | MIP1a active protein

Active Macrophage Inflammatory Protein 1 Alpha (MIP1a)

CATALOG # AAA146611	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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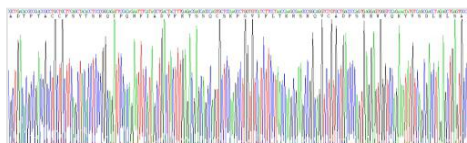
PRODUCT SYNONYMS

Macrophage Inflammatory Protein 1 Alpha (MIP1a); Active Macrophage Inflammatory Protein 1 Alpha (MIP1a); CCL3; MIP1-A; SCYA3; Chemokine C-C-Motif Ligand 3; Small Inducible Cytokine A3; Homologous To Mouse Mip-1a; Tonsillar Lymphocyte LD78 Alpha Protein; MIP1a active protein

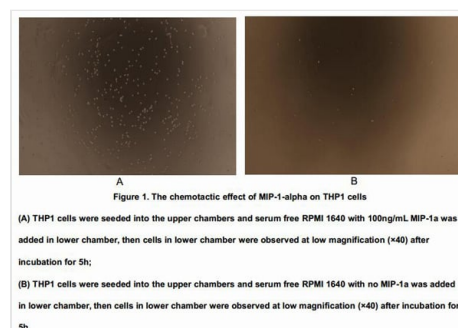
PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	92
Applicable Applications for MIP1a active protein	Activity Assay, Cell Culture
Fragment	Ser24~Ala92
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Organism Species	Human
Isoelectric Point	4.8
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

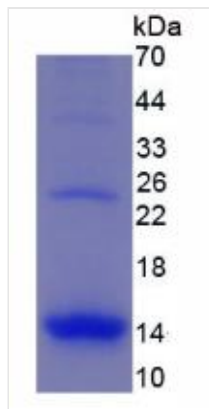
IMAGES



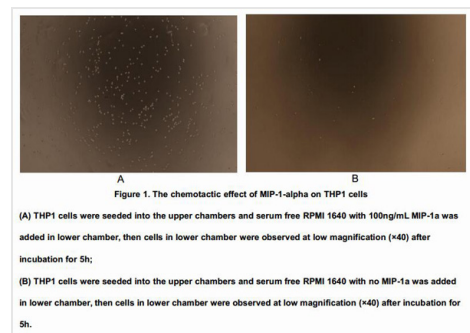
Application Data



Application Data



SDS-PAGE



Activity

MIP-1a (macrophage inflammatory protein 1-alpha) also known as Chemokine (C-C motif) ligand 3 (CCL3), is a cytokine belonging to the CC chemokine family that is involved in the recruitment and activation of macrophages, monocytes and neutrophils. In this case, chemotaxis assay used 24-well microchemotaxis system was undertaken to evaluate the chemotactic effect of MIP-1a on the human monocytic cell line THP1. Briefly, THP1 cells were seeded into the upper chambers (100ul cell suspension, 106 cells/ml in RPMI 1640 with 0.5% FBS) and MIP-1a (100ng/mL, diluted in serum free RPMI 1640) was added in lower chamber with a polycarbonate filter (8um pore size) used to separate the two compartments. After incubation at 37oC with 5% CO2 for 5h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (×40) and the number of migrated cells were counted at high magnification (×400) randomly (five fields for each filter).By counting migrated cells in low chamber at high magnification (×400) randomly, it was shown that a mean of 41.2 THP1 cells/field migrated towards serum free RPMI 1640 medium with 100ng/mL MIP-1a, while only 3.6 THP1 cells/field migrated towards serum free RPMI 1640 medium. And the migrated THP1 cells in low chamber at low magnification (×40) was shown in Figure 1.

ADDITIONAL INFORMATION

Product Categories/Family for MIP1a active protein	Active Protein
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4506843
NCBI GeneID	6348
NCBI Accession #	NP_002974.1
NCBI GenBank Nucleotide #	NM_002983.2
UniProt Accession #	P10147
Molecular Weight	9.3kDa; 14kDa
NCBI Official Full Name	C-C motif chemokine 3
NCBI Official Synonym Full Names	C-C motif chemokine ligand 3
NCBI Official Symbol	CCL3
NCBI Official Synonym Symbols	MIP1A; SCYA3; G0S19-1; LD78ALPHA; MIP-1-alpha
NCBI Protein Information	C-C motif chemokine 3
UniProt Protein Name	C-C motif chemokine 3
UniProt Gene Name	CCL3
UniProt Synonym Gene Names	G0S19-1; MIP1A; SCYA3; MIP-1-alpha

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

