APA095Hu02 100μg
Active Active Macrophage Inflammatory Protein 3 Alpha (MIP3a)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Ala27~Met96
Tags: Two N-terminal Tags, His-tag and GST-tag
Purity: >92%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 8.5
Predicted Molecular Mass: 38.0kDa
Accurate Molecular Mass: 40kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.

Stability Test: 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 37ºC 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.

[SEQUENCE]

ASNF DCCLGYTDRI LHPKFIVGFT
RQLANEGCDI NAIIFHTKKK LSVCANPKQT WVKYIVRLLS KKVKNM

[ACTIVITY]

Macrophage Inflammatory Protein 3 Alpha (MIP3a) also known as Chemokine (C-C motif) ligand 20 (CCL20) or liver activation regulated chemokine (LARC) is a small cytokine belonging to the CC chemokine family. It is strongly chemotactic for lymphocytes and weakly attracts neutrophils. MIP3a is implicated in the formation and function of mucosal lymphoid tissues via chemoattraction of lymphocytes and dendritic cells towards the epithelial cells surrounding these tissues. It is expressed in several tissues such as peripheral blood lymphocytes, lymph nodes, liver, appendix, fetal lung. Expression of MIP3a can be induced by microbial factors such as lipopolysaccharide (LPS), and inflammatory cytokines such as tumor necrosis factor and interferon-γ, and down-regulated by IL-10. Besides, RalA Binding Protein 1 (RALBP1) has been identified as an interactor of MIP3a, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MIP3a and recombinant human RALBP1. Briefly, MIP3a were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to RALBP1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-MIP3a pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate

solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of MIP3a and RALBP1 was shown in Figure 1, and this effect was in a dose dependent manner.

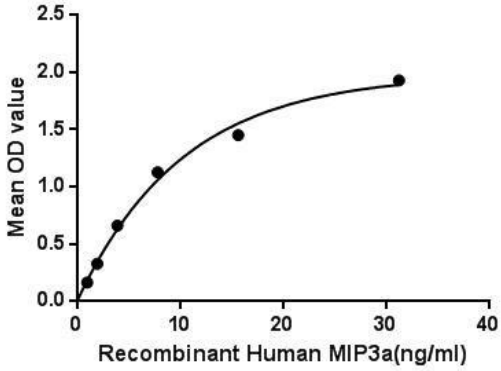

Figure 1. The binding activity of MIP3a with RALBP1.

[IDENTIFICATION]

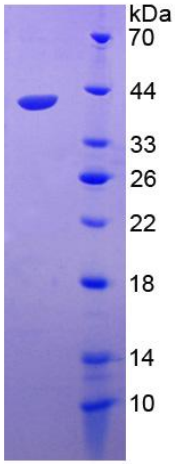

Figure 2. SDS-PAGE

Sample: Active recombinant MIP3a, Human

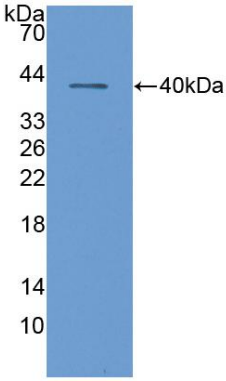

Figure 3. Western Blot

Sample: Recombinant MIP3a, Human;

Antibody: Rabbit Anti-Human MIP3a Ab (PAA095Hu02)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.