APB928Hu01 10μg
Active Monokine Induced By Interferon Gamma (Mig)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Thr23~Thr125
Tags: N-terminal His and GST Tag
Purity: >90%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% Sarcosyl, 5%Trehalose .
Original Concentration: 600μg/mL
Applications: Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 9.3
Predicted Molecular Mass: 44.7kDa
Accurate Molecular Mass: 44kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.2-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8ºC for one month.
Aliquot and store at -80ºC 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 37°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.

[SEQUENCE]

TPVVRKGR CSCISTNQGT IHLQSLKDLK
QFAPSPSCEK IEIIATLKNG VQTCLNPDSA DVKELIKKWE KQVSQKKKQK
NGKKHQKKKV LKVRKSQRSR QKKTT

[ACTIVITY]

Monokine Induced By Interferon Gamma (MIg) is a pro-inflammatory cytokine primarily secreted by immune cells like macrophages and T cells upon IFN-γ stimulation. It plays pivotal roles in regulating immune responses, promoting leukocyte recruitment, and mediating anti-tumor and anti-pathogen defenses. Dysregulation of MIg is linked to autoimmune diseases and chronic inflammation. MIg binds to CXCL12 (SDF1, A122Hu) with moderate affinity, forming a complex that modulates chemotaxis and immune cell trafficking.Thus a functional ELISA assay was conducted to detect the interaction of recombinant human MIg and recombinant human SDF1. Briefly, MIg was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to SDF1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-MIg pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 μL stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human MIg and recombinant human SDF1 was shown in Figure 1, the EC50 for this effect is 2.50 μg/mL.

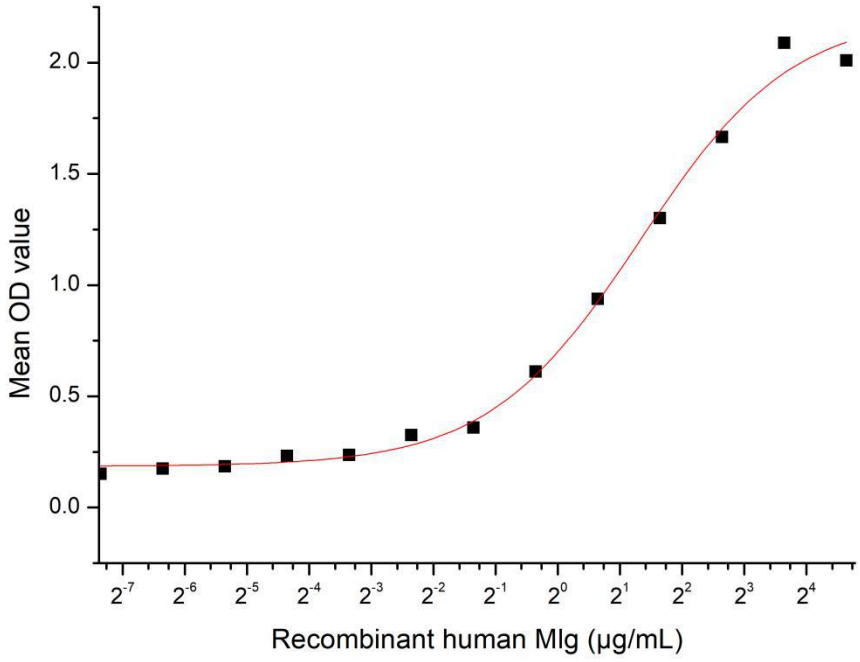

Figure 1. The binding activity of recombinant human Mlg and human SDF1

[IDENTIFICATION]

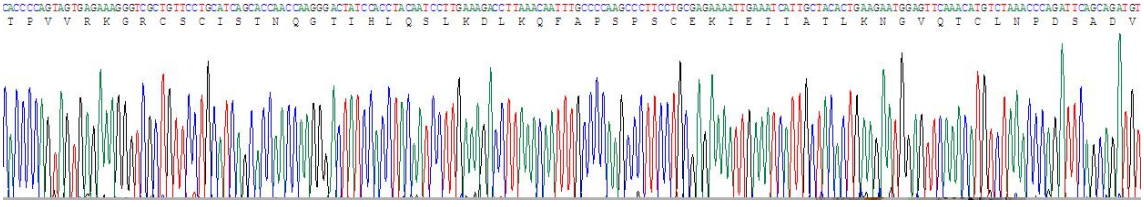

Figure 2. Gene Sequencing (extract)

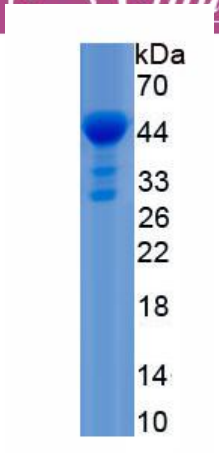

Figure 3. SDS-PAGE

Sample: Active recombinant MIg, Human

[IMPORTANT NOTE]

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