

Active Mannose Binding Lectin (MBL) Instruction Manual

SBPB132Hu02

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 97%

Isoelectric Point

5.8

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

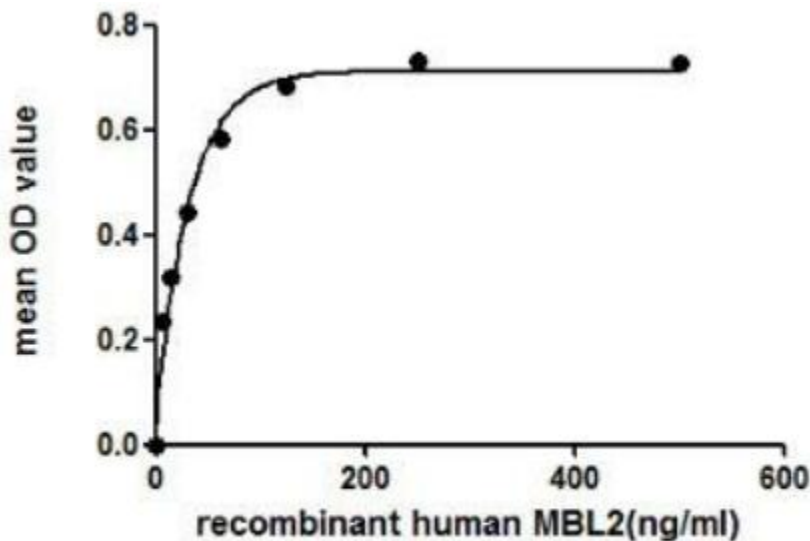


Figure 1. The binding activity of MBL2 with MASP2.

MBL2 (Mannose-binding protein C) is a calcium-dependent lectin involved in innate immune defense, which binds mannose, fucose and N-acetylglucosamine on different microorganisms, therefore results in activation of the lectin pathway of the complement system. It has been proven that MASP-2 (Mannan-binding lectin serine protease 2) forms complexes with the pattern recognition molecules MBL2, triggers the activation of the complement system. Thus, a functional binding ELISA assay was constructed to detect the association of rhMBL2 with MASP2. Briefly, rhMBL2 were diluted serially in 10mM Tris-HCl, 1M NaCl, 5mM CaCl₂, and 0.05% Triton X-100 (pH 7.4). Duplicate samples of 100uL were then transferred to MASP2-coated microtiter wells and incubated for 2h at

37°C. Wells were washed with PBST and incubated for 1h with anti-MBL2 mAb, then aspirated and washed 3 times. After incubation with HRP labeled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated for 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately.

The binding activity of MBL2 with MASP2 was shown in Figure 1 and this effect was in a dose dependent manner.

USAGE

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

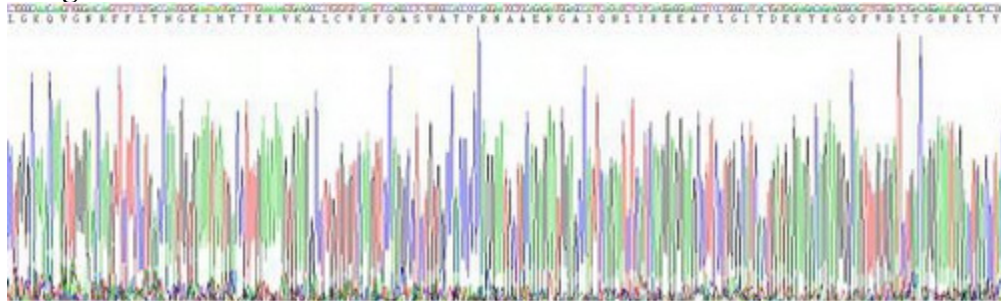
STORAGE

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

STABILITY

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.

Image



SDS-PAGE Image

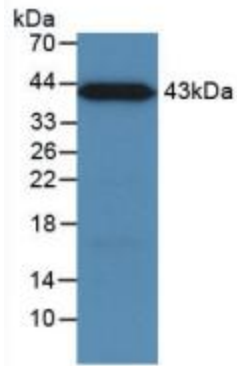


Figure. Western Blot; Sample: Recombinant MBL, Human.

[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.