

Datasheet for ABIN6239795

MBL2 Protein (AA 130-248) (His tag,GST tag)



[Go to Product page](#)

2 Images

Overview

Quantity:	50 µg
Target:	MBL2
Protein Characteristics:	AA 130-248
Origin:	Human
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This MBL2 protein is labelled with His tag,GST tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

Product Details

Characteristics:	Tag location: N-terminal His and GST Tag
Purity:	> 97 %
Biological Activity Comment:	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 CaCl ₂ , 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 37oC. Wells were washed with PBST and incubated for 1h with anti-MBL2 mAb, then aspirated and washed 3 times. After incubation with

Product Details

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 37oC. 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 The binding activity of MBL2 with MASP2.

Target Details

Target:	MBL2
Alternative Name:	Mannose Binding Lectin (MBL) (MBL2 Products)
Background:	Alternative Names: MBL2, COLEC1, HSMBPC, MBP1, MBP, Collectin-1, Mannose-binding protein C, Mannan Binding Protein, Mannose-Binding Lectin(Protein C)2,Soluble(Opsonic Defect)
Molecular Weight:	43kDa
UniProt:	P11226
Pathways:	Complement System , Positive Regulation of Immune Effector Process

Application Details

Application Notes:	Isoelectric Point: 5.8
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

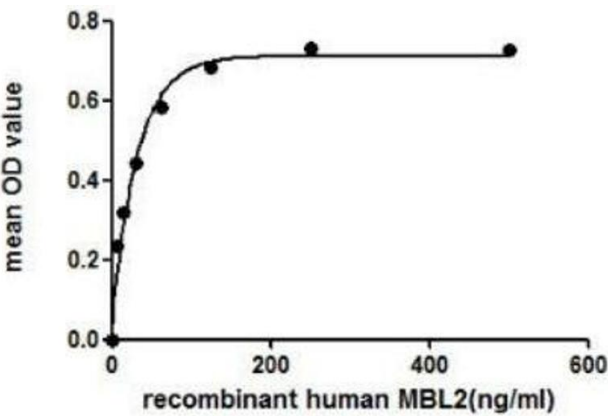


Figure 1. The binding activity of MBL2 with MASP2.

Image 1. The binding activity of MBL2 with MASP2 and this effect was in a dose dependent manner. 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 37oC. 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.

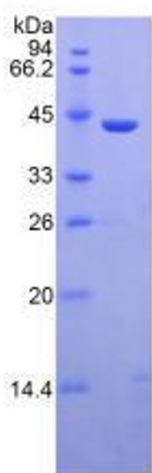


Image 2.