

Mannose Binding Lectin (MBL) Active Protein | MBL active protein

Active Mannose Binding Lectin (MBL)

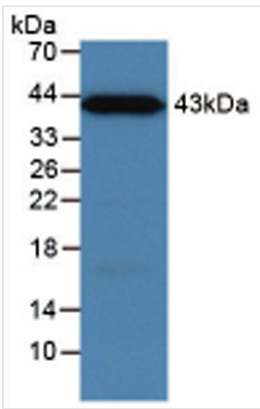
CATALOG # AAA21059	HOST E. coli	APPLICATIONS Cell Culture, Activity Assay
------------------------------	------------------------	---

PRODUCT SYNONYMS

Mannose Binding Lectin (MBL); Active Mannose Binding Lectin (MBL); MBL2; COLEC1; HSMBPC; MBP1; MBP; Collectin-1; Mannose-binding protein C; Mannan Binding Protein; Mannose-Binding Lectin(Protein C)2; Soluble(Opsonic Defect); MBL active protein

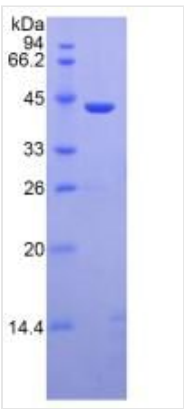
PRODUCT SPECIFICATIONS

Host	E. coli
Purity/Purification	>98%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.01% skl, 5%Trehalose
Applicable Applications for MBL active protein	Cell Culture, Activity Assay
Application Notes	(May be suitable for use in other assays to be determined by the end user.)
Source	Prokaryotic expression
Residues	Leu130~Ile248
Tags	Two N-terminal Tags, His-tag and GST-tag
Endotoxin Level	<1.0EU per 1μg (determined by the LAL method).
Isoelectric point	5.8
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	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 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.



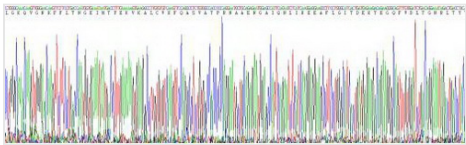
WB (Western Blot)

Figure 4. Western BlotSample: Recombinant MBL, Human;Antibody: Rabbit Anti-Human MBL Ab



SDS-PAGE

Figure 3. SDS-PAGESample: Active recombinant MBL, Human.



Gene Sequencing

Figure 2.Gene Sequencing (Extract)

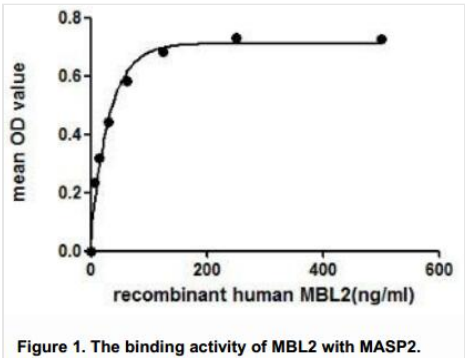


Figure 1. The binding activity of MBL2 with MASP2.

Activity

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 degree 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 degree C. Finally, add 50uL 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.

L	GKQVGNKFFL	TNGEIMTFEK
VKALCVKFQA	SVATPRNAE	NGAIQNLIKE
EAFLGITDEK	TEGFVDLTG	
NRLTYTNWNE	GEPNNAGSDE	DCVLLLNKGQ
WNDVPCSTSH	LAVCEFFPI	

Sequence Information

ADDITIONAL INFORMATION

Product Categories/Family for MBL active protein	Active Protein
--	----------------

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557739
NCBI GeneID	4153
NCBI Accession #	NP_000233.1

NCBI GenBank Nucleotide #	NM_000242.2
UniProt Accession #	P11226 ; Q4VB12 ; Q4VB13 ; Q4VB14 ; Q5SQS3 ; Q86SI4 ; Q96KE4 ; Q96TF7 ; Q96TF8 ; Q96TF9
Molecular Weight	Predicted Molecular Mass: 43.0kDa Accurate Molecular Mass: 43kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	mannose-binding protein C
NCBI Official Synonym Full Names	mannose binding lectin 2
NCBI Official Symbol	MBL2
NCBI Official Synonym Symbols	MBL; MBP; MBP1; MBPD; MBL2D; MBP-C; COLEC1; HSMBPC
NCBI Protein Information	mannose-binding protein C
UniProt Protein Name	Mannose-binding protein C
UniProt Gene Name	MBL2
UniProt Synonym Gene Names	COLEC1; MBL; MBP-C

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/mannose-binding-lectin-mbl/21059>