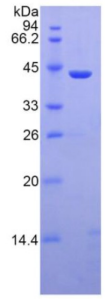
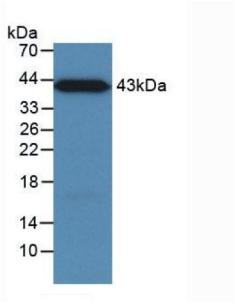
Human Mannose Binding Lectin (MBL) Protein (Active)

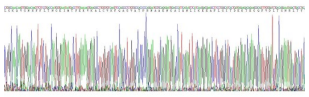
Catalogue No.:abx651411



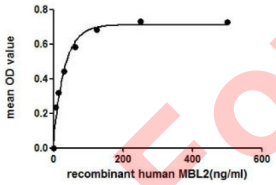
SDS-PAGE analysis of active recombinant Human MBL.



Western blot analysis of recombinant Human MBL, using Rabbit Anti-Human MBL Antibody (abx102168).



Gene sequencing extract of Human MBL.



Binding activity of MBL2 with MASP2 (see Biological Activity section).

Mannose Binding Lectin (MBL) Protein (Active) is an active protein from Human.

Target: Mannose Binding Lectin (MBL)

Origin: Human

Tested Applications: WB, SDS-PAGE

Abbexa LTD, Cambridge, UK · Phone: +44 (0) 1223 755950 · Fax: +44 (0) 1223 755951
Abbexa LLC, Houston, TX USA · Phone: +1 832 327 7413
Abbexa BV, Leiden, NL
Website: www.abbexa.com · Email: info@abbexa.com

Host:	E. coli
Conjugation:	Unconjugated
Form:	Lyophilized
Purity:	> 98%
Reconstitution:	To keep the original salt concentration, we recommend reconstituting to the original concentration prior to lyophilization (see Concentration) in ddH_2O. If a lower concentration is required, dilute in 20 mM Tris, 150 mM NaCl, pH 8.0. If a higher concentration is required, the product can be reconstituted directly in 20 mM Tris, 150 mM NaCl, pH 8.0, though please note that this will change the overall salt concentration. The stock concentration should be between 0.1-1.0 mg/ml. Do not vortex.
Storage:	Store at 2-8 °C for up to one month. Store at -80 °C for up to one year. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P11226 (UniProt, ExPASy)
KEGG:	hsa:4153
String:	9606.ENSP00000363079
Molecular Weight:	Calculated MW: 43.0 kDa Observed MW (SDS-PAGE): 43 kDa
Sequence Fragment:	Leu130-Ile248
Sequence:	L GKQVGNKFFL TNGEIMTFEK VKALCVKFQA SVATPRNAAE NGAIQNLIKE EAFLGITDEK TEGQFVDLTG NRLTYTNWNE GEPNNAGSDE DCVLLLKNGQ WNDVPCSTSH LAVCEFPI
Tag:	N-terminal His tag and GST tag
Buffer:	Prior to lyophilization: 20 mM Tris, 150 mM NaCl, pH 8.0, containing 0.01% Sarcosyl, 5% Trehalose.
Activity:	Active

Abbexa LTD, Cambridge, UK · Phone: +44 (0) 1223 755950 · Fax: +44 (0) 1223 755951
Abbexa LLC, Houston, TX USA · Phone: +1 832 327 7413
Abbexa BV, Leiden, NL
Website: www.abbexa.com · Email: info@abbexa.com

Biological Activity: Mannose Binding Lectin (MBL), also known as Mannose Binding Protein C (MBL2), is a calcium-dependent lectin involved in innate immune defense, which binds mannose, fucose and N-acetylglucosamine on different micro-organisms, therefore results in activation of the lectin pathway of the complement system. Mannose Associated Serine Protease 2 (MASP2) has been identified as an interactor of MBL2 by forming complexes with MBL2, triggering the activation of the complement system, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MBL2 and MASP2. Briefly, MBL2 was diluted serially in 10 mM Tris-HCl, 1 M NaCl, 5 mM $CaCl_2$, and 0.05% Triton X-100 (pH 7.4). Duplicate samples of 100 µl were then transferred to MASP2-coated microplate wells and incubated for 2 h at 37°C. Wells were washed with PBST and incubated for 1 h with anti-MBL2 monoclonal antibody, then aspirated and washed 3 times. After incubation with HRP-conjugated secondary antibody, wells were aspirated and washed 3 times. TMB substrate solution was added and wells were incubated for 15-25 minutes at 37 °C. Finally, 50 µl stop solution was added to the wells and the absorbance was read at 450 nm immediately. The binding activity of MBL2 and MASP2 is shown in Figure 4.

Endotoxin Level: < 1.0 EU per 1 µg (LAL method)

Concentration: Prior to lyophilization: 200 µg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

Abbexa LTD, Cambridge, UK · Phone: +44 (0) 1223 755950 · Fax: +44 (0) 1223 755951
Abbexa LLC, Houston, TX USA · Phone: +1 832 327 7413
Abbexa BV, Leiden, NL
Website: www.abbexa.com · Email: info@abbexa.com