Mouse MBL-2 / MBL Protein (Fc Tag)

Catalog Number: **50063-M04H**

General Information

Gene Name Synonym:

L-MBP; MBL; MBL-C; MBP-C

Protein Construction:

A DNA sequence encoding the mouse Mbl2 (NP_034906.1) (Glu19-Asp244) was expressed with the Fc region of mouse IgG1 at the N-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Predicted N terminal: Asp

Molecular Mass:

The recombinant mouse Mbl2 consists 462 amino acids and predicts a molecular mass of 50.6 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

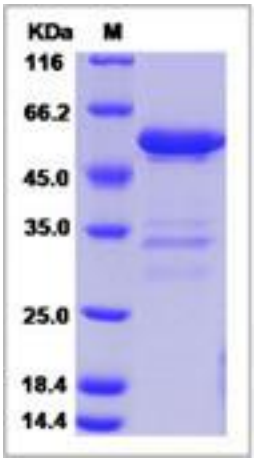
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

MBL (mannose-binding lectin) is primarily a liver-derived collagen-like serum protein, which binds sugar structures on micro-organisms and on dying host cells and is one of the four known mediators that initiate activation of the complement system via the lectin pathway. MBL and the ficolins (Ficolin-1, Ficolin-2 and Ficolin-3) are soluble collagen-like proteins that are involved in innate immune defence. They bind sugar structures or acetylated compounds present on microorganisms and on dying host cells and they initiate activation of the lectin complement pathway in varying degrees. MBL2 encodes the mannose-binding lectin, which is a key player in the innate immune system and has recently been found to play a role in development of type 1 diabetes and gestational diabetes mellitus. Common variant alleles situated both in promoter and structural regions of the MBL2 gene influence the stability and the serum concentration of the protein. Several polymorphisms in the promoter and structural regions of MBL2 adversely affect the plasma concentration and oligomeric state of MBL. The possession of mutant alleles has been linked to disease outcome for a variety of bacterial and viral infections. Mutant MBL2 haplotypes have been linked to disease progression and response to therapy in HCV infection.

References

1.Garred P, et al. (2006) Mannose-binding lectin and its genetic variants. Genes Immun. 7(2): 85-94.
2.Brown KS, et al. (2007) Mannan binding lectin and viral hepatitis. Immunol Lett. 108(1): 34-44.
3.Garred P. (2008) Mannose-binding lectin genetics: from A to Z. Biochem Soc Trans. 36(Pt 6): 1461-6.