

## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

**Product name** LBP, Mouse, clone M330-19

Catalog number HM1026-20UG

Lot number - Expiry date -

Volume 200  $\mu$ l Amount 20  $\mu$ g

Formulation 0.2 μm filtered in PBS+0.1%BSA Concentration 100 μg/ml

Host Species Rat IgG2a Conjugate None

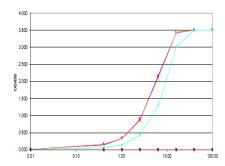
Endotoxin level < 24 EU/mg Purification Protein G

Storage 4°C

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #					1,2,3	1		
Yes					•	•		
No								
N.D.	•	•	•	•			•	•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IA: Antibody M330-19 as tracer with several different concentrations in Immuno assay. Experiment is performed with purified mouse LBP.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

 FS: Antibody M330-19 prevented the binding of LPS to LBP and the subsequent activation of target cells, but this has no effect on preformed LPS/LBP complexes (Ref. 1).

# General Information

**Description**The monoclonal antibody M330-19 reacts highly specific with mouse natural and recombinant LBP. The antibody is a type I antibody blocking the LPS binding to LBP.

LPS binding protein (LBP) is an approximately 60 kDa acute phase protein that is produced by hepatocytes. This protein strongly binds to LPS and has been shown to play an important role in the handling of LPS by the host. A number of functions of LBP have been reported. First, LBP transfers LPS to the LPS receptor CD14 on mononuclear phagocytes, leading to an 100-1,000-fold increased sensitivity of the cells to LPS. Furthermore, LBP can enhance the response of CD14 negative cells by acceleration of LPS binding to soluble CD14, a complex that stimulates these cells. Next, LBP transfers LPS into High Density Lipoprotein (HDL), which effectively neutralizes its biological potency. LBP was demonstrated to protect mice from septic shock caused by LPS or gram negative bacteria.

Version: 08-2020

Immunogen Recombinant murine LBP

Aliases Lipopolysaccharide-binding protein

Cross reactivity Purified human LBP: No (Ref.1)

#### References

- Le Roy, D et al; Monoclonal antibodies to murine lipopolysaccharide (LPS)-binding protein (LBP) protect mice from lethal endotoxemia by blocking either the binding of LPS to LBP or the presentation of LPS/LBP complexes to CD14. J Immunol 1999, 162: 7454
- Le Roy, D et al; Critical role of lipopolysaccharide-binding protein and CD14 in immune response against gramnegative bacteria. J Immunol 2001, 169: 2759
- Heumann, D et al; Role of Plasma, Lipopolysaccharide-Binding Protein, and CD14 in Response of Mouse Peritoneal Exudate Macrophages to Endotoxin. Inf and Immun 2001, 69: 378

### Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

#### **Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Brenda Teunissen

Date 26/10/2020

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.

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