

**MONOCLONAL ANTIBODY TO
MOUSE LIPOPOLYSACCHARIDE BINDING PROTEIN (LBP)
Clone RR433-8**



Catalog nr	HM1027 (lot number and expiry date are indicated on the label)
Description	<p>The monoclonal antibody RR433-8 reacts highly specific with mouse natural and recombinant LBP. The antibody is a type II antibody blocking the LPS binding to CD14.</p> <p>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.</p>
Species	Rat IgG _{2a}
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.02% sodium azide and 0.1% bovine serum albumin.
Application	The antibody can be used for functional studies in vitro and in vivo aimed at blocking LBP. Furthermore the antibody is useful for immuno assays and for Western blotting.
Use	For Western blotting 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 1:10. For neutralization of biological activity dilutions have to be made according to the amounts LBP to be inactivated. Before use in biological assays, the product must be filter sterilized and depending on the concentration to be used dialyzed against culture medium to remove the sodium azide added. Please inquire for availability of azide free solutions.
Storage and stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for 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. Hbt is not responsible for any patent infringements that might result with the use of or derivation of this product.
References	<ol style="list-style-type: none">1. 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. <i>J Immunol</i> 1999, <i>162</i>: 74542. Le Roy, D et al; Critical role of lipopolysaccharide-binding protein and CD14 in immune response against gram-negative bacteria. <i>J Immunol</i> 2001, <i>169</i>: 2759
Also available	HM1026 Monoclonal antibody against Mouse LBP, clone M330-19 HM1028 Monoclonal antibody against Mouse LBP, clone M392-2