

Lbp monoclonal antibody, clone biG 33

Catalog # MAB5664

Size 100 ug

Specification

Product Description Mouse monoclonal antibody raised against recombinant Lbp.

Immunogen Recombinant protein corresponding to mouse Lbp.

Host Mouse

Reactivity Mouse, Rat

Specificity The monoclonal antibody biG 33 reacts highly specific with mouse natural and recombinant LBP. This 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 a 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.

Form Lyophilized

Purification Protein G purification

Isotype IgG1

Recommend Usage ELISA (1:50000)
The optimal working dilution should be determined by the end user.

Storage Buffer Lyophilized from PBS.

Storage Instruction Store at -20°C on dry atmosphere.
After reconstitution with deionized water, store at -80°C for 6 up to 8 months.
Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot
- Enzyme-linked Immunoabsorbent Assay

Gene Info — Lbp

Entrez GeneID	16803
Gene Name	Lbp
Gene Alias	Ly88
Gene Description	lipopolysaccharide binding protein
Gene Ontology	Hyperlink
Other Designations	OTTMUSP00000016997 lipopolysaccharide-binding protein

Publication Reference

- [Specific adipose tissue Lbp gene knockdown prevents diet-induced body weight gain, impacting fat accretion-related gene and protein expression.](#)

Jessica Latorre, Francisco Ortega, Núria Oliveras-Cañellas, Ferran Comas, Aina Lluch, Aleix Gavaldà-Navarro, Samantha Morón-Ros, Wifredo Ricart, Francesc Villarroya, Marta Giralt, José Manuel Fernández-Real, José María Moreno-Navarrete.

Molecular Therapy. Nucleic Acids 2022 Mar; 27:870.

Application: WB-Tr, Mouse, Mouse adipose tissue

- [A role for adipocyte-derived lipopolysaccharide-binding protein in inflammation-and obesity-associated adipose tissue dysfunction.](#)

Moreno-Navarrete JM, Escote X, Ortega F, Serino M, Campbell M, Michalski MC, Laville M, Xifra G, Luche E, Domingo P, Sabater M, Pardo G, Waget A, Salvador J, Giralt M, Rodriguez-Hermosa JI, Camps M, Kolditz CI, Viguerie N, Galitzky J, Decaunes P, Ricart W, Fruhbeck G, Villarroya F, Mingrone G, Langin D, Zorzano A, Vidal H, Vendrell J, Burcelin R, Vidal-Puig A, Fernandez-Real JM.

Diabetologia 2013 Nov; 56(11):2524.

Application: WB-Ce, Human, Adipocytes

- [Surfactant protein a inhibits lipopolysaccharide-induced immune cell activation by preventing the interaction of lipopolysaccharide with lipopolysaccharide-binding protein.](#)

Stamme C, Muller M, Hamann L, Gutschmann T, Seydel U.

American Journal of Respiratory Cell and Molecular Biology 2002 Sep; 27(3):353.

Application: EMSA, Human, HEK 293 cells

- [Dual role of lipopolysaccharide \(LPS\)-binding protein in neutralization of LPS and enhancement of LPS-induced activation of mononuclear cells.](#)

Gutsmann T, Muller M, Carroll SF, MacKenzie RC, Wiese A, Seydel U.

Infection and Immunity 2001 Nov; 69(11):6942.

Application: Func, TR-FRET, Human, Human mononuclear cells, Recombinant protein

- [Binding of lipopolysaccharide \(LPS\) to CHO cells does not correlate with LPS-induced NF-kappaB activation.](#)

Hamann L, Schumann RR, Flad HD, Brade L, Rietschel ET, Ulmer AJ.

European Journal of Immunology 2000 Jan; 30(1):211.

Application: Flow Cyt, Mouse, CHO cells