

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LBP in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 127420
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human LBP Ala26-Val481 Accession # AAD21962
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human LBP Monoclonal Antibody (Catalog # MAB870) or Mouse Anti-Human LBP Recombinant Monoclonal Antibody (Catalog # MAB870R). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human LBP DuoSet ELISA Kit (Catalog # DY870-05) for convenient development of a sandwich ELISA.</i>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Lipopolysaccharide-binding protein (LBP), a 58 kDa glycoprotein synthesized in hepatocytes, belongs to a family of lipid-binding proteins which includes bactericidal/permeability increasing protein (BPI), phospholipid ester transfer protein (PLTP), and cholesterol ester transfer protein (CETP). LBP binds to the lipid A portion of lipopolysaccharide (LPS) to facilitate the process of LPS monomerization, catalyze the binding of LPS monomers to CD14, and promote LPS-induced immune response. LBP is present at low concentrations in normal human serum and may increase up to 30-fold during the acute phase response. Studies indicate that LBP also acts catalytically in the transfer of LPS to HDL, thus accelerating LPS detoxification. In addition, LBP and soluble CD14 can also function in phospholipid transport.

References:

1. Hailman, E. *et al.* (1994) J. Exp. Med. **179**:269.
2. Jack, R.S. *et al.* (1997) Nature **389**:742.
3. Schumann, R.R. *et al.* (2000) Chem. Immunol. **74**:42.