

Human LBP protein, His tag

Cat. No. GTX00248-pro

Applications	Functional Assay	Package 10 μg
Species	Human	13

Applications

Application Note

Lipopolysaccharide Binding Protein (LBP) is a soluble acute-phase protein that binds to bacterial lipopolysaccharide (or LPS) to elicit immune responses by presenting the LPS to important cell surface pattern recognition receptors called CD14 and TLR4. The protein encoded by this gene is involved in the acute-phase immunologic response to gram-negative bacterial infections. This protein is part of a family of structurally and functionally related proteins, including BPI, plasma cholesteryl ester transfer protein (CETP), and phospholipid transfer protein (PLTP). Besides, Cluster Of Differentiation 14 (CD14) has been identified as an interactor of LBP, thus a binding ELISA assay was conducted to detect the interaction of recombinant human LBP and recombinant human CD14. Briefly, LBP were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to CD14-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-LBP pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of LBP and CD14 was in a dose dependent manner.

Observed MW (kDa) 52 kDa.

Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His-Tag; Asn27~Val481 (NP_004130.2)	
Expression System	E. coli	
Purity	> 95%	
Endotoxin	< 1 EU/µg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	



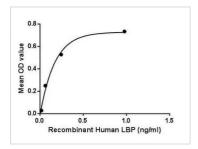
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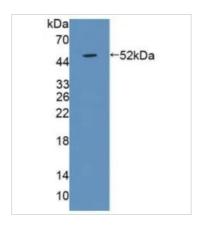


DATA IMAGES



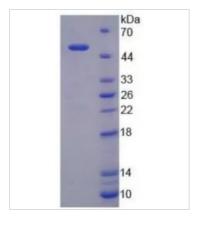
GTX00248-pro Functional Assay Image

Functional ELISA analysis of GTX00248-pro Human LBP protein which can bind immobilized CD14 protein.



GTX00248-pro Image

WB analysis of GTX00248-pro Human LBP protein.



GTX00248-pro Image

SDS-PAGE analysis of GTX00248-pro Human LBP protein.



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