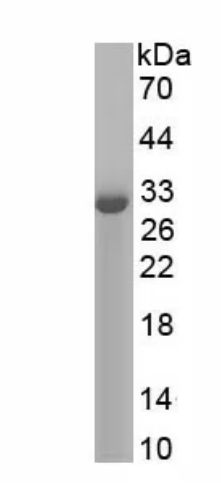
# Active Lipopolysaccharide Binding Protein (LBP)

*Catalog#:PEV12668*

## 概述（Summary）

| | |
|---|---|
| **别称（Alternative Names）** | LPS-Binding Protein |
| **纯度（Purity）** | Greater than 95% as determined by reducing SDS-PAGE. |
| **内毒素（Endotoxin level）** | Please contact with the lab for this information |
| **蛋白构建（Construction）** | 【His224-Asp468】 |
| **Accession #** | Q2TBI0 |
| **表达宿主（Host）** | E.coli |
| **种属（Species）** | Bos taurus; Bovine (Cattle) |
| **预测分子量（Predicted MW）** | 31.2 kDa |
| **制剂（Form）** | Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. |
| **运输方式（Shipping）** | The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below. |
| **稳定性&储存（Stability &Storage）** | 12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles. |
| **复溶（Reconstitution）** | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex. |
| **背景介绍（References）** | Plays a role in the innate immune response. Binds to the lipid A moiety of bacterial lipopolysaccharides (LPS), a glycolipid present in the outer membrane of all Gram-negative bacteria. Acts as an affinity enhancer for CD14, facilitating its association with LPS. Promotes the release of cytokines in response to bacterial lipopolysaccharide. |

## 电泳图（SDS-PAGE image）




Greater than 95% as determined by reducing SDS-PAGE.

## 活性图（Bioactivity image）

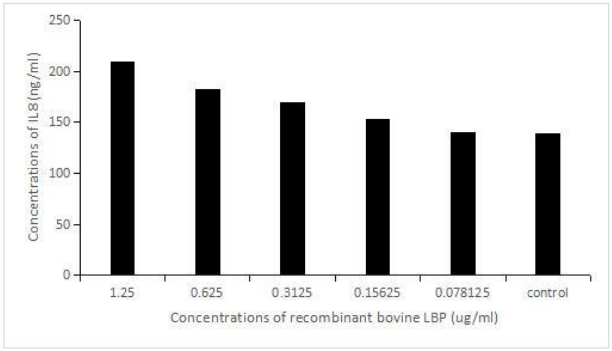



**Figure1. IL-8 levels in the cell supernatant of THP-1 induced by recombinant bovine LBP**

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. 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). It has been reported that LBP can enhance LPS-stimulated IL-8 secretion by THP-1 cells. To test the bioactivity of recombinant bovine LBP, THP-1 cells were seeded into 24-well plate at a density of 1x106 cells/mL including 1 ug/mL LPS, and treated with certain concentrations (0.078125 ug/mL-1.25 ug/mL) of rbLBP for 24h and IL-8 levels in the cell supernatant were determined by ELISA. IL-8 levels in the cell supernatant of THP-1 cells increased significantly after stimulated with recombinant bovine LBP have shown in Figure 1.

## 注意事项（Note）

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