

Lipopolysaccharide Binding Protein (LBP) Active Protein | LBP active protein

Active Lipopolysaccharide Binding Protein (LBP)

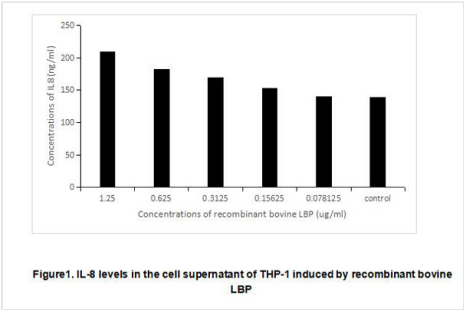
CATALOG # AAA161846	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Lipopolysaccharide Binding Protein (LBP); Active Lipopolysaccharide Binding Protein (LBP); Lipopolysaccharide Binding Protein; LPS-Binding Protein4; LBP active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	His224-Asp 468
Applicable Applications for LBP active protein	Activity Assay, Cell Culture
Species	Bovine
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.8
Research Area	Infection immunity
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

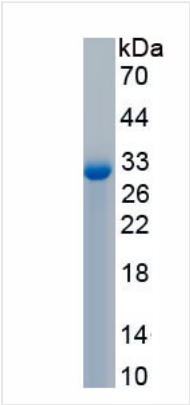


Bioactivity

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.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for LBP active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	84579853
NCBI GeneID	512242
NCBI Accession #	NP_001033763.1
NCBI GenBank Nucleotide #	NM_001038674.2
UniProt Accession #	Q2TB10
Molecular Weight	53,698 Da
NCBI Official Full Name	lipopolysaccharide-binding protein
NCBI Official Symbol	LBP
NCBI Protein Information	lipopolysaccharide-binding protein
UniProt Protein Name	Lipopolysaccharide-binding protein
UniProt Gene Name	LBP
UniProt Synonym Gene Names	LBP

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.