

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

Active Lipopolysaccharide Binding Protein (LBP)

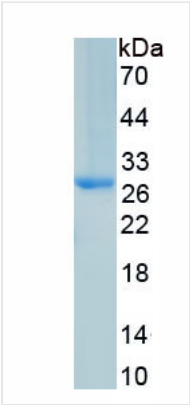
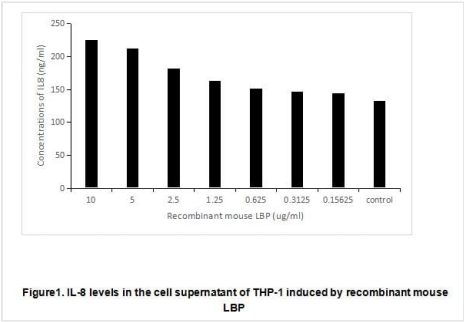
CATALOG # AAA161847	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

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	Leu226~Pro 438
Applicable Applications for LBP active protein	Activity Assay, Cell Culture
Species	Mouse
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	9.1
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 mouse 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 (0.15625 ug/mL-10 ug/mL) of rmlBP 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 mouse 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 #	113865991
NCBI GeneID	16803
NCBI Accession #	NP_032515.2
NCBI GenBank Nucleotide #	NM_008489.2
UniProt Accession #	Q61805; Q99KA0; A2AC66
Molecular Weight	53,055 Da
NCBI Official Full Name	lipopolysaccharide-binding protein
NCBI Official Synonym Full Names	lipopolysaccharide binding protein
NCBI Official Symbol	Lbp
NCBI Official Synonym Symbols	Ly88; Bpifd2
NCBI Protein Information	lipopolysaccharide-binding protein
UniProt Protein Name	Lipopolysaccharide-binding protein
UniProt Gene Name	Lbp
UniProt Synonym Gene Names	LBP
UniProt Entry Name	LBP_MOUSE

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.