

Association of LBP with LPS

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

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- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
- Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res*, 46, D649-D655. [↗](#)
- Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

Reactome database release: 88

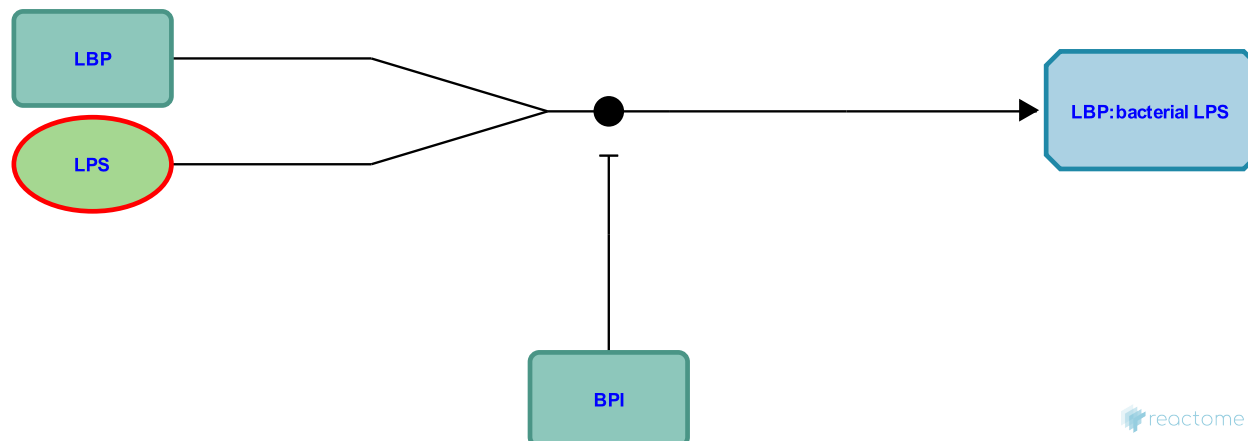
This document contains 1 reaction ([see Table of Contents](#))

Association of LBP with LPS [↗](#)

Stable identifier: R-HSA-166015

Type: binding

Compartments: extracellular region



Lipopolysaccharide-binding protein (LBP) is a ~60-kDa serum glycoprotein which transfers LPS to both membrane-bound and soluble CD14. The LPS binding site of LBP consists of basic residues that bind the phosphorylated head of the bacterial lipid A.

LBP is an acute-phase opsonin that binds gram-negative bacteria and bacterial fragments and promote the interaction of coated bacteria with phagocytes.

Literature references

Ramos, RA., Ulevitch, RJ., Wright, SD., Tobias, PS. (1989). Lipopolysaccharide (LPS) binding protein opsonizes LPS-bearing particles. *J Exp Med*, 170, 1231-41. [↗](#)

Editions

2005-08-16	Authored	de Bono, B.
2006-04-24	Reviewed	Gay, NJ.
2010-11-16	Edited	Shamovsky, V.
2010-11-30	Reviewed	Gillespie, ME.
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