

Hemes bind LY96

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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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Reactome database release: 88

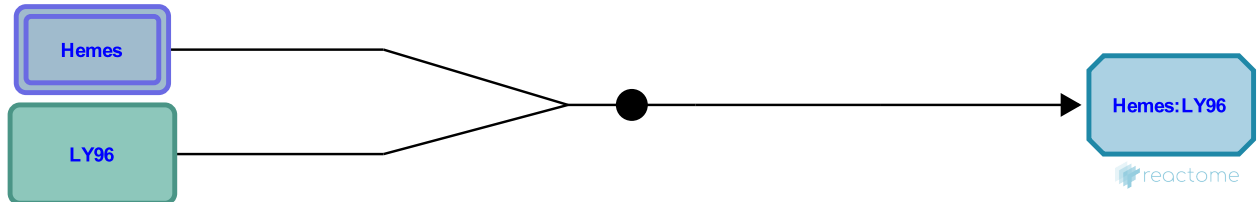
This document contains 1 reaction ([see Table of Contents](#))

Hemes bind LY96 [↗](#)

Stable identifier: R-HSA-9707594

Type: binding

Compartments: extracellular region



Secreted LY96 (MD-2) is a large protein that confers lipopolysaccharide (LPS) sensitivity to Toll-like receptor 4 (TLR4). Hemes can bind to secreted LY96 at a different site than LPS, resulting in comparable TLR4 activation (Belcher et al, 2002; Visintin et al, 2001).

Literature references

Belcher, JD., Nath, KA., Kiser, ZM., Nguyen, J., Trent, JO., Zhang, P. et al. (2020). Identification of a Heme Activation Site on the MD-2/TLR4 Complex. *Front Immunol*, 11, 1370. [↗](#)

Editions

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