# MyD88 forms a complex with TIRAP:activated TLR2/4

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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

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics, 18*, 142. ↗

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

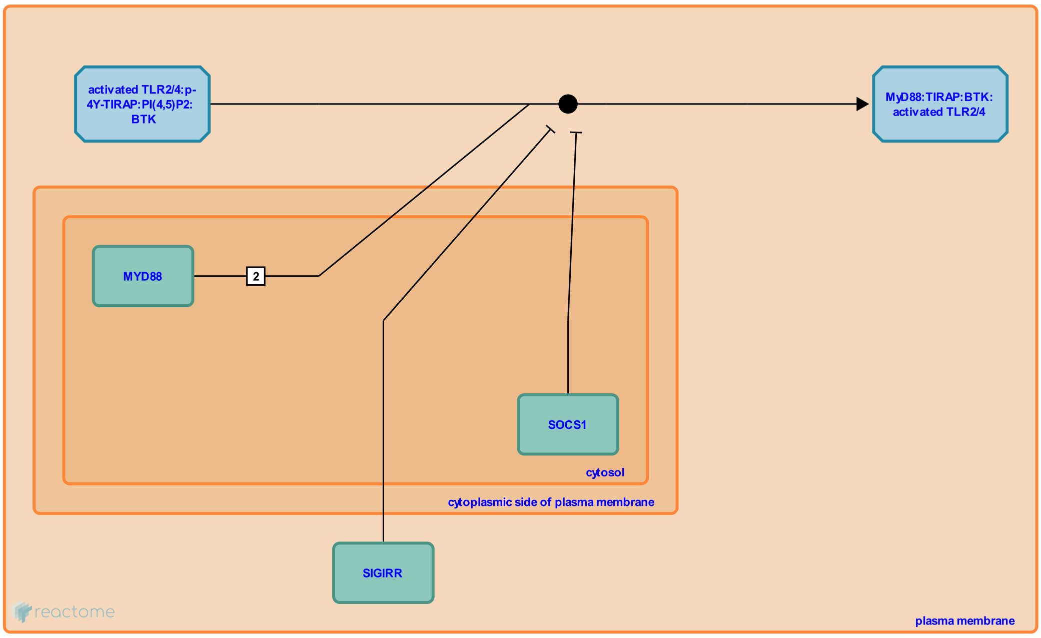
This document contains 1 reaction (see Table of Contents)

## MyD88 forms a complex with TIRAP:activated TLR2/4 ↗

**Stable identifier:** R-HSA-166072

**Type:** binding

**Compartments:** plasma membrane, cytosol


activated TLR2/4:p-4Y-TIRAP:PI(4,5)P2:BTK
MyD88:TIRAP:BTK:activated TLR2/4
MYD88
2
SOCS1
cytosol
cytoplasmic side of plasma membrane
SIGIRR
plasma membrane

MyD88 binds to IRAK (IL-1 receptor-associated kinase) and the receptor heterocomplex (the signaling complex) and thereby mediates the association of IRAK with the receptor. MyD88 therefore couples a serine/threonine protein kinase to the receptor complex.

## Literature references

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Barton, GM., Horng, T., Medzhitov, R., Flavell, RA. (2002). The adaptor molecule TIRAP provides signalling specificity for Toll-like receptors. *Nature, 420*, 329-33. ↗

## Editions

| | | |
|---|---|---|
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