IRAK4 autophosphorylation in the complex with MyD88:activated TLR 7/8 or 9

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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. ↗

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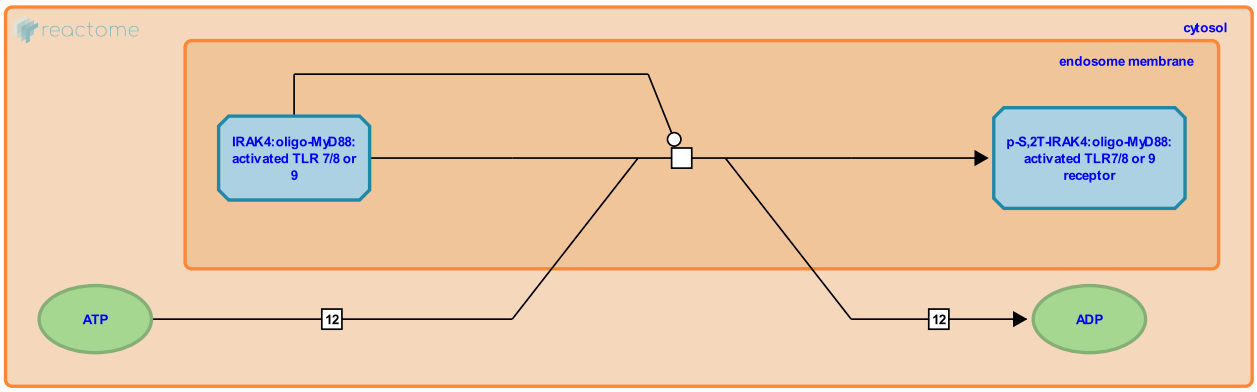
Stable identifier: R-HSA-975170

Type: transition

Compartments: endosome membrane, cytosol



IRAK4 is activated by autophosphorylation at 3 positions within the kinase activation loop, Thr-342, Thr-345 and Ser-346.

Literature references

Takeuchi, O., Yamamoto, M., Sato, S., Jung, A., Akira, S., Matsui, K. et al. (2007). Essential role of IRAK-4 protein and its kinase activity in Toll-like receptor-mediated immune responses but not in TCR signaling. *J Exp Med, 204*, 1013-24. ↗

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Editions

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