Phosphorylation of IRAK2 bound to the activated IRAK4:MyD88 oligomer: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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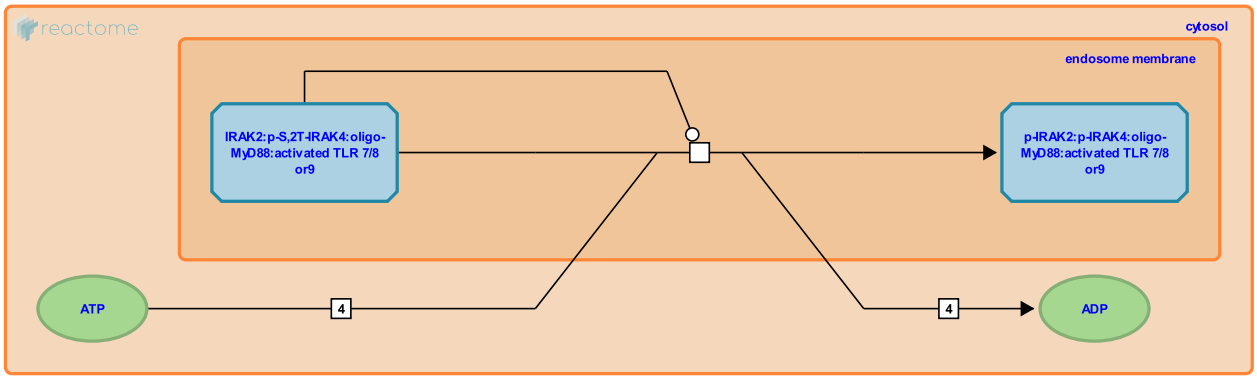
Stable identifier: R-HSA-975160

Type: transition

Compartments: endosome membrane, cytosol



IRAK4 deficient macrophages fail to induce IRAK2 phosphorylation (Kawagoe et al. 2008), suggesting that activated IRAK4 phosphorylates IRAK2 as it does IRAK1.

Phosphorylation sites of IRAK2 remain to be characterized.

Literature references

Kumagai, Y., Kawai, T., Takeuchi, O., Saitoh, T., Matsushita, K., Sato, S. et al. (2008). Sequential control of Toll-like receptor-dependent responses by IRAK1 and IRAK2. *Nat Immunol, 9*, 684-91.

Editions

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