PRLR is phosphorylated at Ser-349

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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. ↗

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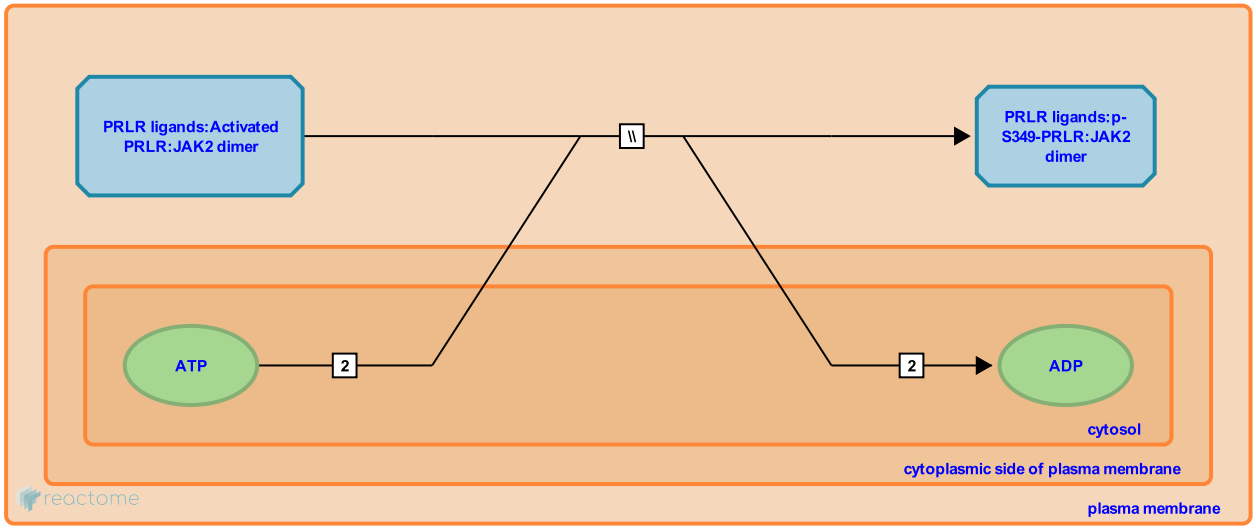
Stable identifier: R-HSA-1370505

Type: omitted

Compartments: plasma membrane



The PRL responsiveness of target cells is negatively regulated by receptor internalization, ubiquitination and degradation, which limit the duration and intensity of receptor signaling (Djiane et al. 1981, 1982, Lu et al. 2002). The PRLR is phosphorylated on Ser-349 by an unidentified kinase (Li et al. 2006) enabling subsequent recruitment of the SCF beta-TrCP ubiquitin ligase complex (Li et al. 2004).

Literature references

Li, Y., Kumar, KG., Tang, W., Spiegelman, VS., Fuchs, SY. (2004). Negative regulation of prolactin receptor stability and signaling mediated by SCF(beta-TrCP) E3 ubiquitin ligase. *Mol Cell Biol, 24*, 4038-48. ↗

Editions

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