

Recruitment of PLCgamma to membrane due to FCGR3A effect

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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](#))

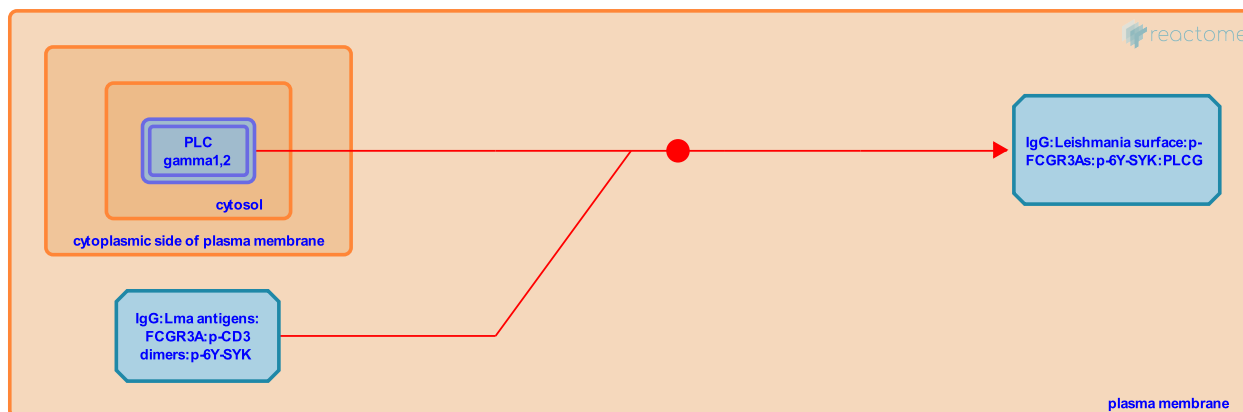
Recruitment of PLCgamma to membrane due to FCGR3A effect ↗

Stable identifier: R-HSA-9664270

Type: binding

Compartments: plasma membrane, cytosol, extracellular region

Diseases: cutaneous leishmaniasis



PLCgamma (PLCG) is recruited to FCGR and the phosphorylated Y342 and Y346 in SYK have been reported to be involved in the interaction of PLCG (Law et al. 1996). PLCG accumulates at the phagocytic cup during FCGR, but the exact role of PLCG in the regulation of phagocytosis is not clear. It may be involved in FCGR signaling by activating PKC through DAG production (Garcia-Garcia & Rosales 2002)

Literature references

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- Chandran, KA., Law, CL., Clark, EA., Sidorenko, SP. (1996). Phospholipase C-gamma1 interacts with conserved phosphotyrosyl residues in the linker region of Syk and is a substrate for Syk. *Mol Cell Biol*, 16, 1305-15. ↗

Editions

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