

SLP-76 stimulates PLC gamma 2

Akkerman, JW., Harper, MT., Jones, ML., Jupe, S., Poole, AW.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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https://reactome.org

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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- 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)

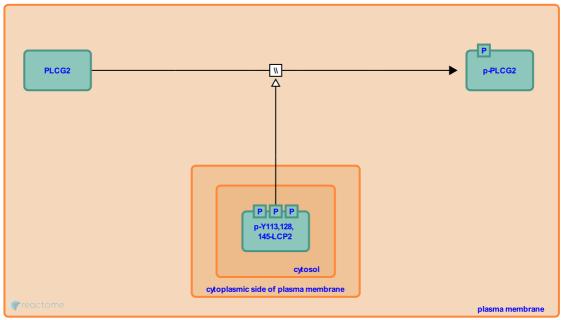
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Stable identifier: R-HSA-429497

Type: omitted

Compartments: plasma membrane



SLP-76 has a well-established role in recruitment of PLC gamma 1 in immunoreceptor signalling; its role in the recruitment of PLC gamma 2 in integrin signalling is less clear. Results from SLP-76 null mice imply a functional role in GPVI signalling. Platelets from SLP-76 null mice exhibit a marked reduction in spreading and a decrease in whole cell phosphotyrosine levels when adhered to a fibrinogen-coated surface. In vivo reconstitution of SLP-76 by retroviral gene transfer corrects bleeding diathesis and restores normal responses to both collagen and fibrinogen (Judd et al., 2000).

Literature references

Yap, CL., Hughan, SC., Goncalves, I., Jackson, SP., Schoenwaelder, SM., Yuan, Y. (2003). Integrin alpha IIb beta 3-dependent calcium signals regulate platelet-fibrinogen interactions under flow. Involvement of phospholipase C gamma 2. *J Biol Chem*, 278, 34812-22.

Editions

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