

SHC1 dissociates from integrin alphaIIb beta3

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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

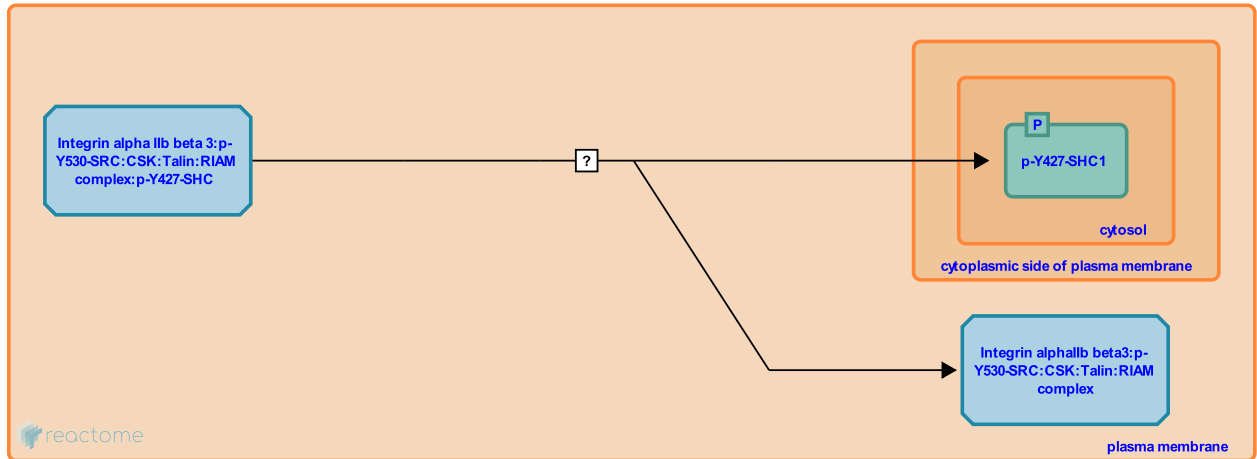
This document contains 1 reaction ([see Table of Contents](#))

SHC1 dissociates from integrin alphaIIb beta3 [↗](#)

Stable identifier: R-HSA-443910

Type: uncertain

Compartments: plasma membrane



In a mechanism that is presumed to be analogous to signaling of SHC downstream of the insulin and TrkA receptors, SHC becomes phosphorylated and dissociates from the integrin alphaIIb beta3 complex.

Literature references

Pelicci, G., Bonfini, L., Migliaccio, E., Lanfrancone, L., Pelicci, PG. (1996). Not all Shc's roads lead to Ras. *Trends Biochem Sci*, 21, 257-61. [↗](#)

Phillips, DR., Cowan, KJ., Law, DA. (2000). Identification of shc as the primary protein binding to the tyrosine-phosphorylated beta 3 subunit of alpha IIbeta 3 during outside-in integrin platelet signaling. *J Biol Chem*, 275, 36423-9. [↗](#)

Editions

2009-09-04	Authored	Akkerman, JW.
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