

SPP1 (osteopontin) binds integrins alphaVbeta1, alphaVbeta3, alphaVbeta5

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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](#))

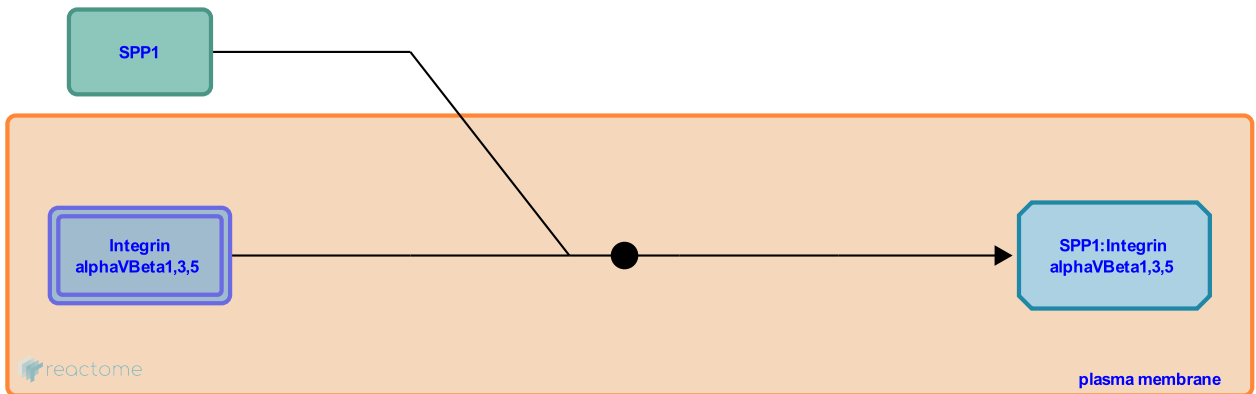
SPP1 (osteopontin) binds integrins alphaVbeta1, alphaVbeta3, alphaVbeta5 ↗

Stable identifier: R-HSA-2752125

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: Osteopontin binds Integrins alphaVbeta1, 3, 5 (Homo sapiens)



Osteopontin (SPP1) is a highly phosphorylated sialoprotein that is a prominent component of the mineralized extracellular matrices of bones and teeth. It binds multiple integrins, including alphaVbeta3, alphaVbeta1 and alphaVbeta5 (Liaw et al. 1995) alpha9beta1 (Smith et al. 1996, Yokosaki et al. 1999), alpha4beta1 (Bayliss et al. 1998) and the receptor CD44 (Katagiri et al. 1999).

Editions

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