

Interaction of integrin alpha9beta1 with VCAM1

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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

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- 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: 83

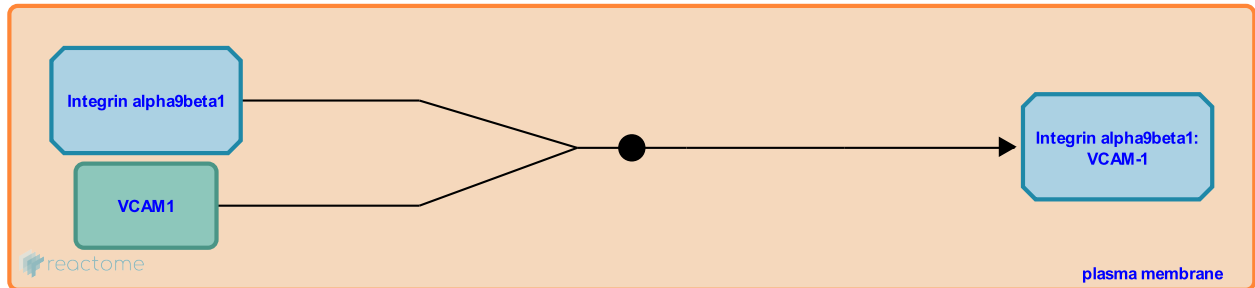
This document contains 1 reaction ([see Table of Contents](#))

Interaction of integrin alpha9beta1 with VCAM1 [↗](#)

Stable identifier: R-HSA-265428

Type: binding

Compartments: plasma membrane



Integrin alpha9beta1 is widely expressed on smooth muscle, epithelial cells, and highly and specifically expressed on neutrophils. VCAM-1 is one of the effective ligands for the integrin alpha9beta1. This interaction mediates the neutrophil migration on VCAM-1 and extravasation of neutrophils at sites of acute inflammation.

Literature references

Yednock, T., Taooka, Y., Sheppard, D., Chen, J. (1999). The integrin alpha9beta1 mediates adhesion to activated endothelial cells and transendothelial neutrophil migration through interaction with vascular cell adhesion molecule-1. *J Cell Biol*, 145, 413-20. [↗](#)

Editions

2008-03-11	Edited	Garapati, P V.
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