

# Interaction of integrin alphaVbeta3 with IPSP (Bone sialoprotein 2)

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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. [↗](#)
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Reactome database release: 77

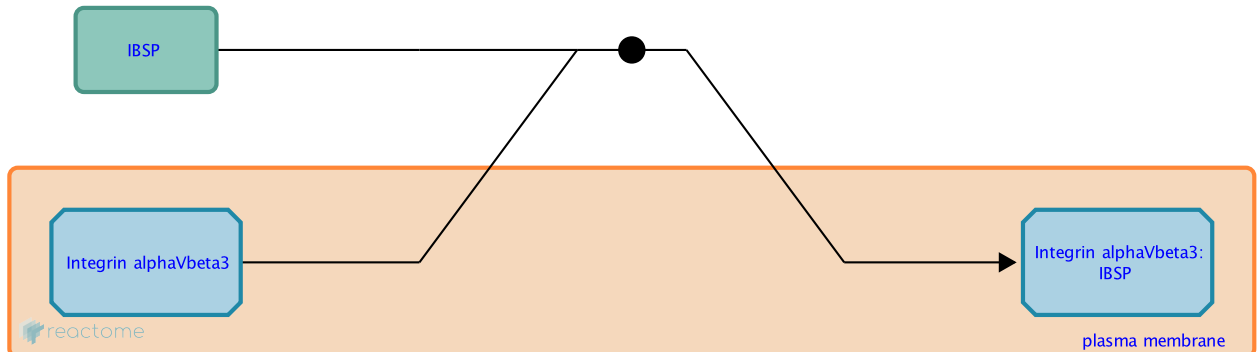
This document contains 1 reaction ([see Table of Contents](#))

## Interaction of integrin alphaVbeta3 with IPSP (Bone sialoprotein 2) ↗

**Stable identifier:** R-HSA-265427

**Type:** binding

**Compartments:** extracellular region, plasma membrane



Integrin alphaVbeta3 receptor has been implicated in various physiological and pathological responses, including bone density, angiogenesis, apoptosis, tumor growth and metastasis.

Bone sialoprotein (BSP) is a significant component of the bone extracellular matrix and plays an important role in bone resorption and osteoclast formation. BSP is considered as an important physiological ligand of alphaVbeta3 for osteoclast adhesion in bone development and mineralization.

### Literature references

Byzova, TV., Kim, W., Midura, RJ., Plow, EF. (2000). Activation of integrin alpha(V)beta(3) regulates cell adhesion and migration to bone sialoprotein. *Exp Cell Res*, 254, 299-308. ↗

### Editions

2008-03-11	Edited	Garapati, P V.
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