GP1b-IX-V activation signalling

This is just an excerpt of a full-length report for this pathway. To access the complete report, please download it at the Reactome Textbook.

15/05/2024

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

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

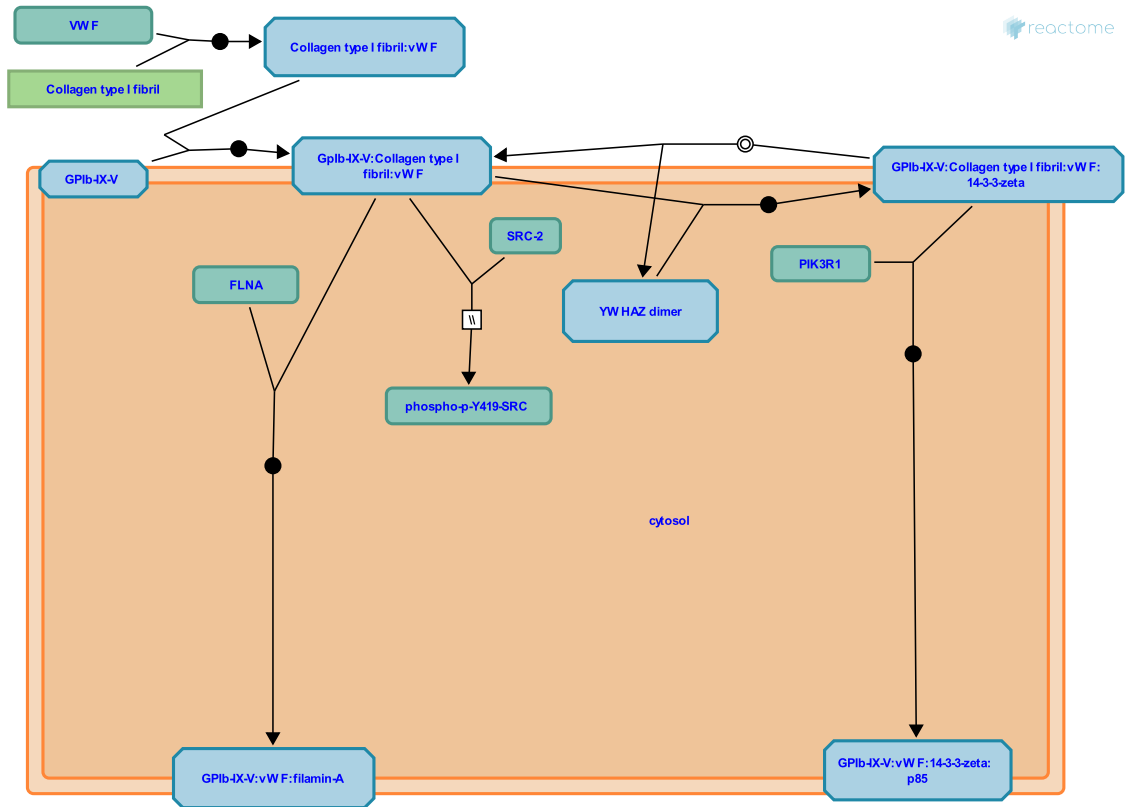This document contains 1 pathway and 7 reactions (see Table of Contents)

GP1b-IX-V activation signalling ↗

Stable identifier: R-SSC-430116

Compartments: plasma membrane

Inferred from: GP1b-IX-V activation signalling (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp
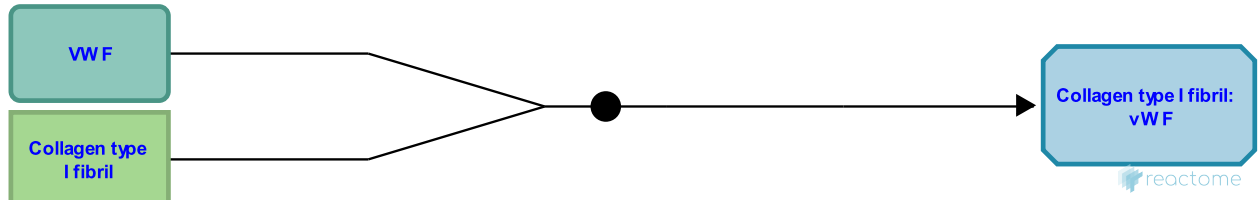
vWF binds to collagen ↗

Location: GP1b-IX-V activation signalling

Stable identifier: R-SSC-114671

Type: binding

Compartments: extracellular region

Inferred from: vWF binds to collagen (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp

Followed by: GPIb-IX-V binds to vWF:Collagen complex
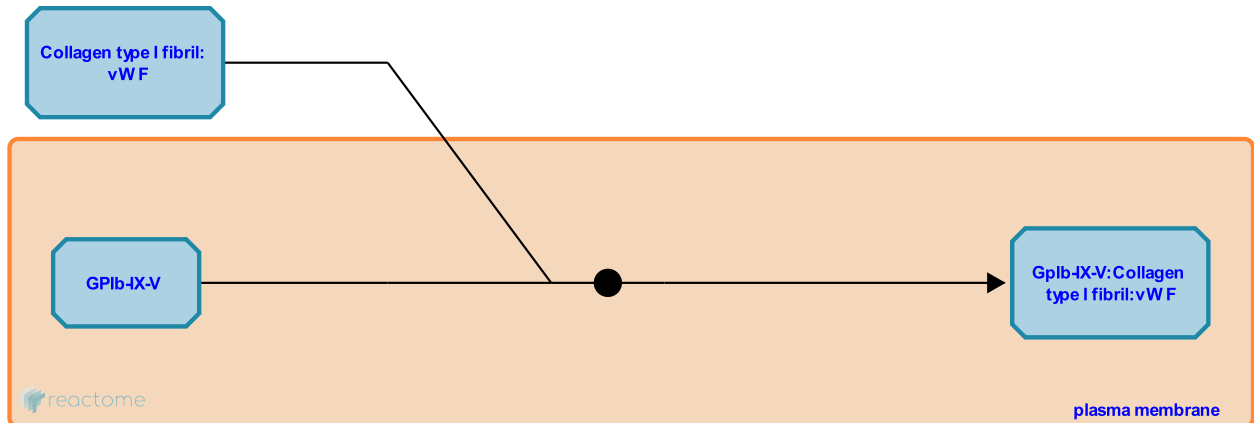
GPIb-IX-V binds to vWF:Collagen complex ↗

Location: GP1b-IX-V activation signalling

Stable identifier: R-SSC-114670

Type: binding

Compartments: plasma membrane, extracellular region

Inferred from: GPIb-IX-V binds to vWF:Collagen complex (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp

Preceded by: vWF binds to collagen

Followed by: GP1b signaling involves c-Src, GP1b-IX-V binds filamin, GP1b-IX-V binds 14-3-3-zeta

GP1b-IX-V binds 14-3-3-zeta ↗

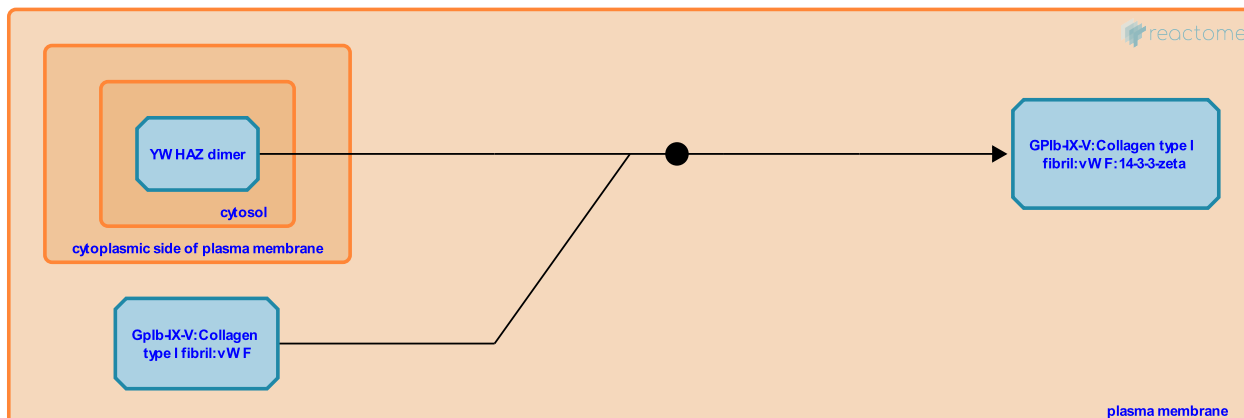**Location:** GP1b-IX-V activation signalling

Stable identifier: R-SSC-430076

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: GP1b-IX-V binds 14-3-3-zeta (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp

Preceded by: GPIb-IX-V binds to vWF:Collagen complex

Followed by: GPIb-IX-V binding to 14-3-3 zeta is reduced by shear stress, GP1b-IX-V:13-3-3-zeta complexes with p85 PI3K

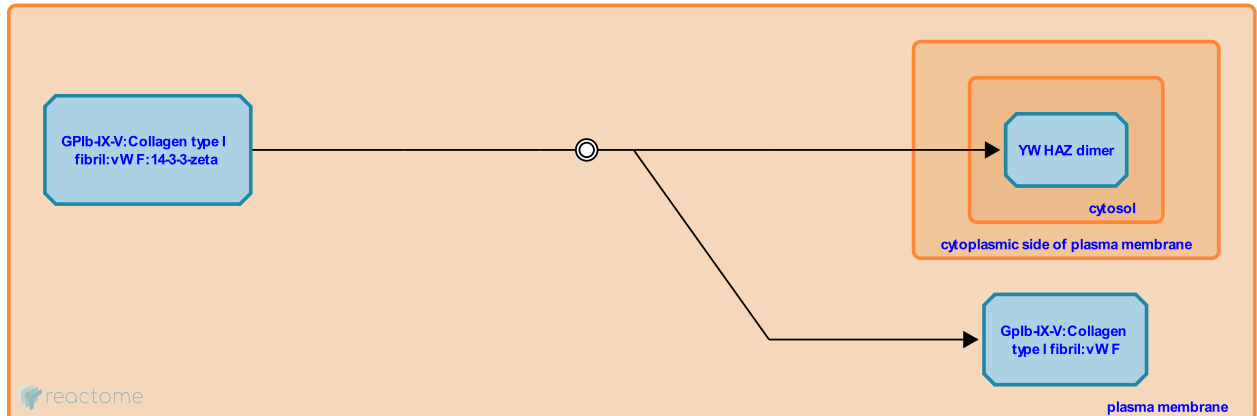## GPIb-IX-V binding to 14-3-3 zeta is reduced by shear stress ↗

Location: GP1b-IX-V activation signalling

Stable identifier: R-SSC-430073

Type: dissociation

Compartments: plasma membrane, cytosol

Inferred from: GPIb-IX-V binding to 14-3-3 zeta is reduced by shear stress (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp

Preceded by: GP1b-IX-V binds 14-3-3-zeta
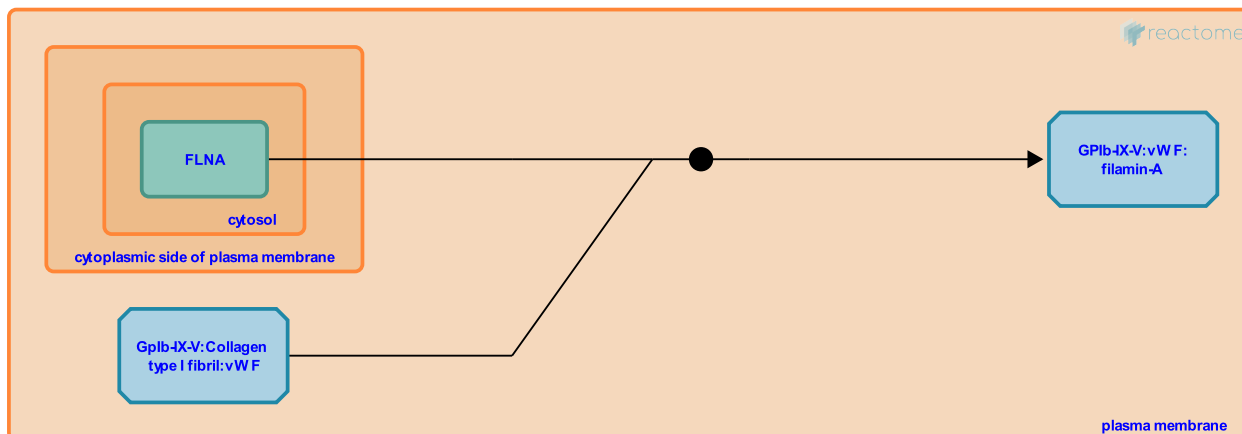
GP1b-IX-V binds filamin ↗

Location: GP1b-IX-V activation signalling

Stable identifier: R-SSC-430096

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: GP1b-IX-V binds filamin (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp

Preceded by: GPIb-IX-V binds to vWF:Collagen complex

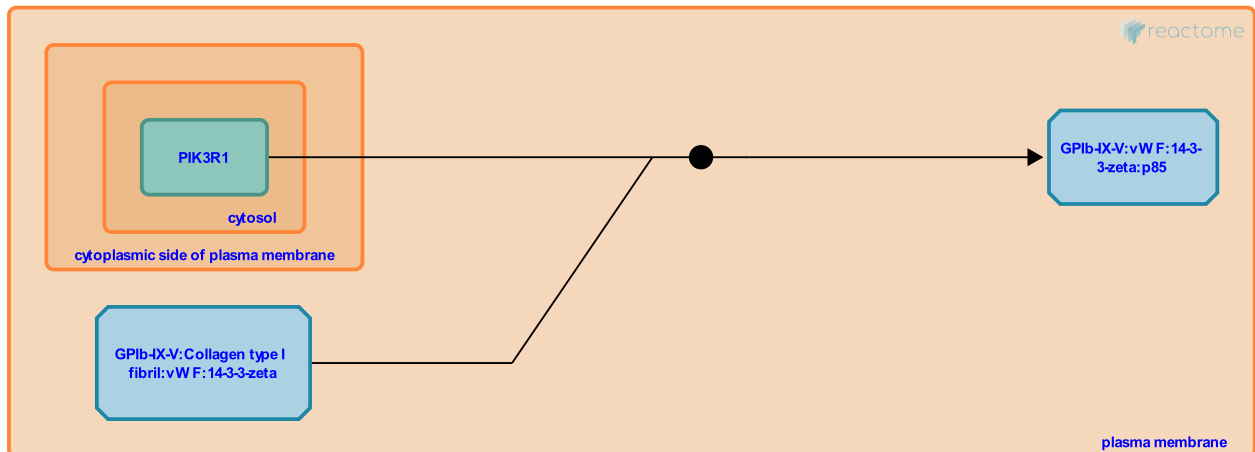## GP1b-IX-V:13-3-3-zeta complexes with p85 PI3K ↗

Location: GP1b-IX-V activation signalling

Stable identifier: R-SSC-443402

Type: binding

Compartments: plasma membrane, cytosol

Inferred from: GP1b-IX-V:13-3-3-zeta complexes with p85 PI3K (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp

Preceded by: GP1b-IX-V binds 14-3-3-zeta

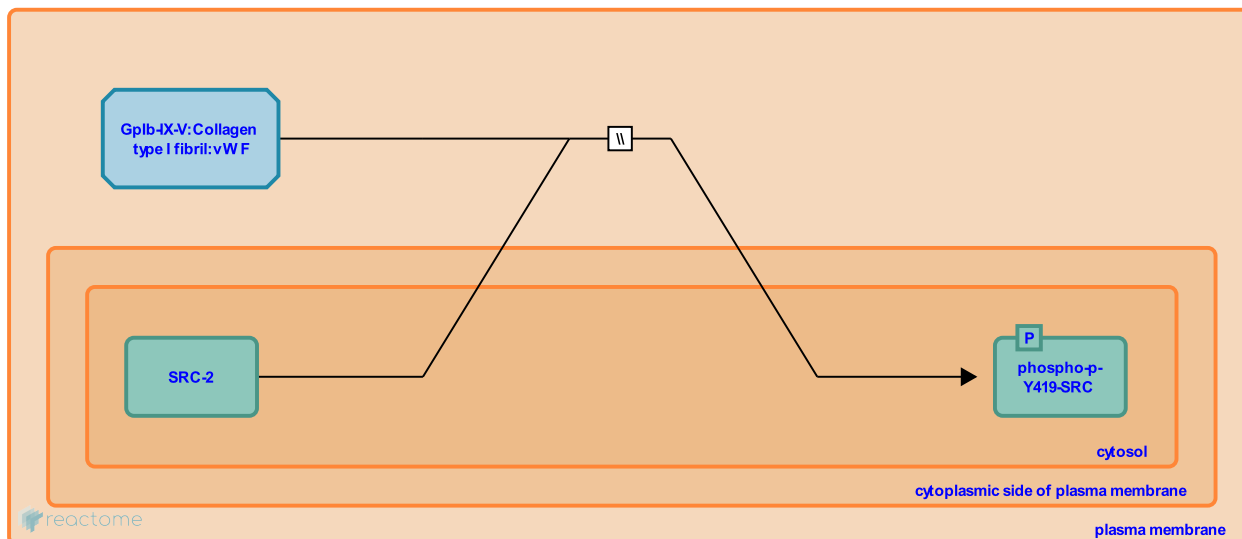# GP1b signaling involves c-Src ↗

Location: GP1b-IX-V activation signalling

Stable identifier: R-SSC-443418

Type: omitted

Compartments: plasma membrane

Inferred from: GP1b signaling involves c-Src (Homo sapiens)

This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

More details and caveats of the event inference in Reactome. For details on PANTHER see also: http://www.pantherdb.org/about.jsp

Preceded by: GPIb-IX-V binds to vWF:Collagen complex

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