Recruitment of SYK to p-FCERI gamma subunit

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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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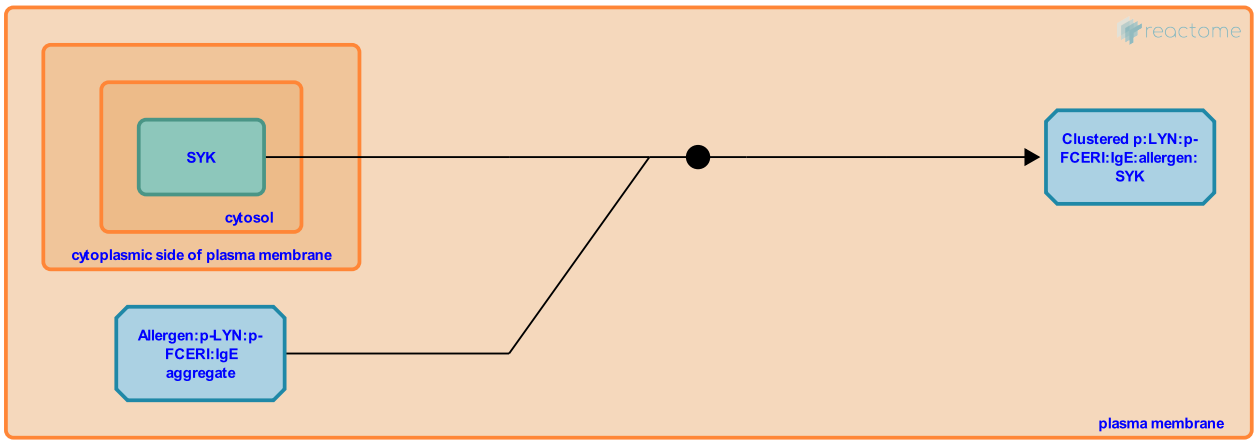
Stable identifier: R-HSA-2454240

Type: binding

Compartments: plasma membrane, cytosol



Tyrosine phosphorylated ITAM in FCERI gamma subunit serves as docking site for SYK (spleen tyrosine kinases), whereas the beta-subunit ITAM has an extra tyrosine and is shorter than canonical ITAM which makes it unfit to bind SYK. Association of SYK to FCERI gamma-subunit disrupts the COOH-terminal-SH2 interdomain interaction of SYK causing a conformational change opening the molecule leading to its activation (Siraganian et al. 2010, de Castro et al. 2010).

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Editions

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