

LYN phosphorylates CD22

Garapati, P V., Paulson, JC.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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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This document contains 1 reaction (see Table of Contents)

LYN phosphorylates CD22 7

Stable identifier: R-HSA-5690702

Type: transition

Compartments: plasma membrane



After ligation of membrane-bound IgM, CD22 is quickly tyrosine phosphorylated on its cytoplasmic ITIM sequence (immunoreceptor tyrosine-based inhibition motif). The tyrosine kinase involved in CD22 phosphorylation is LYN, a member of the Src kinase family (Smith et al. 1998). The CD22 cytoplasmic tail contains six tyrosines, three of which belong to the ITIM sequence (Nitschke & Tsubata 2004).

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Editions

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