Interaction of Csk with PAG

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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


Reactome database release: 73

This document contains 1 reaction (see Table of Contents)
Interaction of Csk with PAG

Stable identifier: R-HSA-203774

Type: binding

Compartments: cytosol, plasma membrane

Csk is a tyrosine kinase that phosphorylates the negative regulatory C-terminal tyrosine residue Y505 of Lck to maintain Lck in an inactive state. In resting T cells, Csk is targeted to lipid rafts through engagement of its SH2 domain with phosphotyrosine residue pY317 of PAG. PAG is expressed as a tyrosine phosphorylated protein in nonstimulated T-cells. This interaction of Csk and PAG allows activation of Csk and inhibition of Lck. Given that PAG-1 T cell knock out show a weak phenotype, some other protein may substitute in activating Csk.

Literature references


Editions

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