Phosphorylated SHC recruits GRB2:SOS1

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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: 78

This document contains 1 reaction (see Table of Contents)
Phosphorylated SHC recruits GRB2:SOS1

**Stable identifier:** R-HSA-453111

**Type:** binding

**Compartments:** cytosol, plasma membrane

Shc is tyrosine phosphorylated by an unidentified kinase, creating a docking site for the SH2 domain of Grb2 (Zhu et al. 1994). Grb2 is an adaptor protein believed to be constitutively associated with the guanine nucleotide exchange protein Sos1 (often abbreviated to Sos). Recruitment of the Grb2:Sos1 complex leads to activation of the Ras pathway (Ravichandran & Burakoff 1994) and consequently activation of the MAPK pathway.

**Literature references**


**Editions**

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