Activated Src activates ERK

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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)

https://reactome.org
Activated Src activates ERK

**Stable identifier:** R-HSA-418163

**Type:** omitted

**Compartments:** cytosol

Within the beta-arrestin-1:Src:ERK complex, activated Src phosphorylates and activates ERK. ERK activation requires dual Thr and Tyr phosphorylations, at Thr202/Tyr204 for human ERK1 and Thr185/Tyr187 for human ERK2. Significant ERK activation requires phosphorylation at both sites, with Tyr phosphorylation preceding that of Thr. This reaction is given as a black-box event because the phosphorylation state of ERK on binding to beta-arrestin-1 is unknown.

**Literature references**


**Editions**

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