Dimerization of KIT upon SCF binding

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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)
**Dimerization of KIT upon SCF binding**

**Stable identifier:** R-HSA-205231

**Type:** binding

**Compartments:** plasma membrane, extracellular region

Binding of the SCF dimer to KIT rapidly triggers KIT dimerization and autophosphorylation. It is thought that one SCF dimer binds simultaneously to two KIT monomers. The fourth Ig-like domain of KIT contains the dimerisation site; deletion of this domain completely abolishes KIT dimerisation and subsequent downstream signaling (Edling et al. 2007, Blechman et al. 1995). KIT dimerization is a crucial initial step in the SCF signal transduction process.

**Literature references**


**Editions**

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