Recruitment of IFNAR1

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02/05/2024

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

Literature references

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Reactome database release: 88

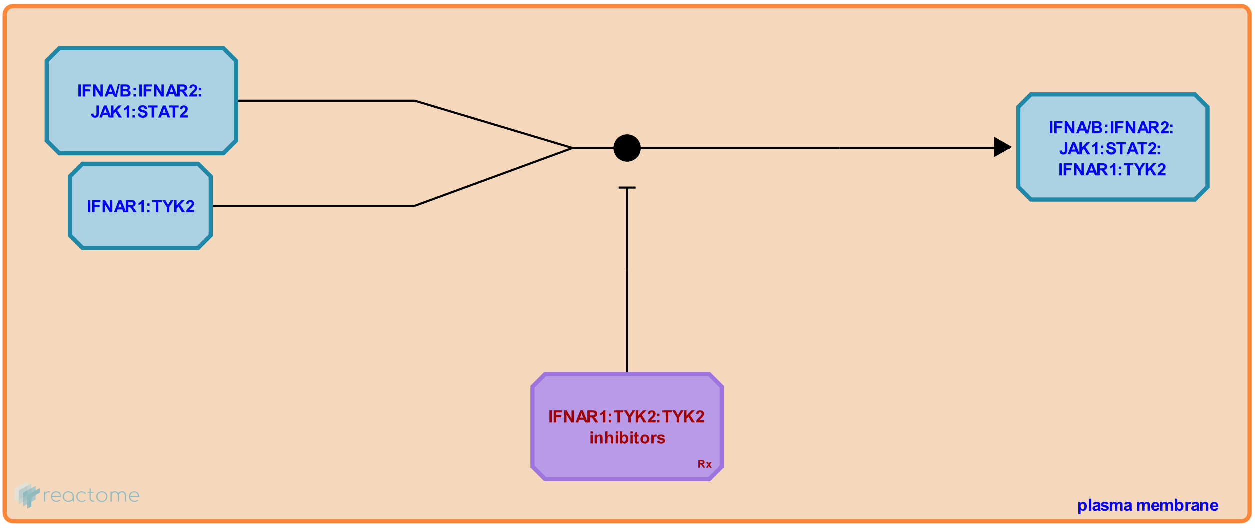
This document contains 1 reaction (see Table of Contents)

Recruitment of IFNAR1 ↗

Stable identifier: R-HSA-909724

Type: binding

Compartments: plasma membrane



The extracellular domain of IFNAR1 is atypical, consisting of a tandem array of four FNIII domains and the first three N-terminal FNIII domains are involved in ligand recognition. IFNAR1 is recruited to the binary complex (IFNA/B:IFNAR2) on the membrane to form the ternary complex (IFNAR2:IFNA/B:IFNAR1). TYK2 kinase is pre-associated with IFNAR1 and JAK1 with IFNAR2. The binding of IFNA/B to IFNA receptors brings these JAK kinase together, allowing cross-phosphorylation and kinase activation.

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Editions

2010-07-07	Authored, Edited	Garapati, P V.
2010-08-17	Reviewed	Schindler, C., Abdul-Sater, AA.