

Plasma membrane FGFR1 fusions auto-phosphorylate

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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

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Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res*, 46, D649-D655. [↗](#)

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Reactome database release: 88

This document contains 1 reaction ([see Table of Contents](#))

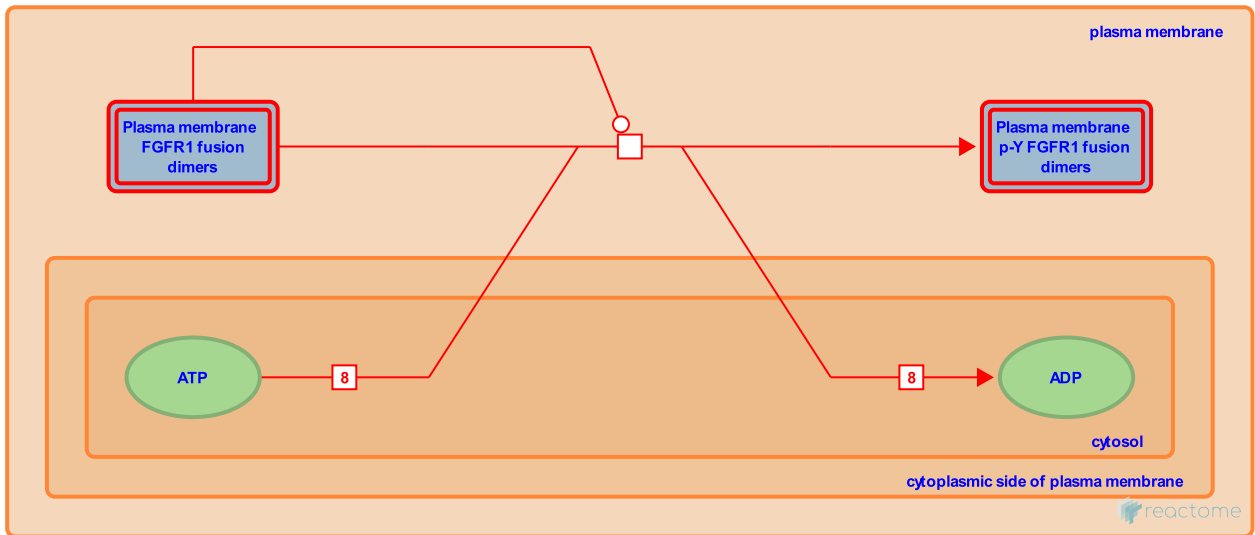
Plasma membrane FGFR1 fusions autophosphorylate [↗](#)

Stable identifier: R-HSA-8853325

Type: transition

Compartments: plasma membrane

Diseases: cancer



Although it hasn't been directly demonstrated in all cases, the ability to promote transformation and anchorage independent growth suggests these fusions undergo autophosphorylation similar to WT FGFR1 proteins. Indeed, active kinase activity has been demonstrated for the the ERLIN2-FGFR1 fusion identified in breast cancer (Singh et al, 2012; Wu et al, 2013; Wang et al, 2014; reviewed in Parker et al, 2014)

Literature references

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Editions

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