Autophosphorylation of PDGFR mutant dimers

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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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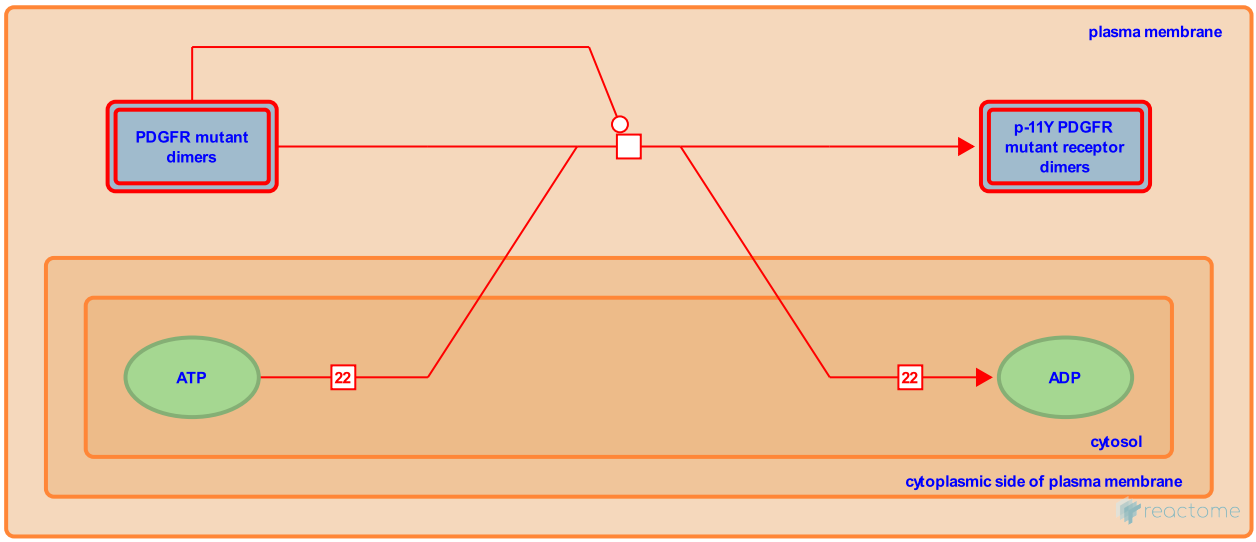
Stable identifier: R-HSA-9672175

Type: transition

Compartments: cytosol, plasma membrane

Diseases: cancer



Activating mutations in the kinase, juxtamembrane and transmembrane domains of PDGFRA lead to constitutive, ligand-independent dimerization and trans-autophosphorylation, and stimulate downstream signaling pathways (Heinrich et al, 2003; Hirota et al, 2003; Corless et al, 2005; Velghe et al, 2014; reviewed in Roskoski et al, 2018; Klug et al, 2018).

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Editions

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