

Diacylglycerol activates Protein kinase C, alpha type

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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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Reactome database release: 88

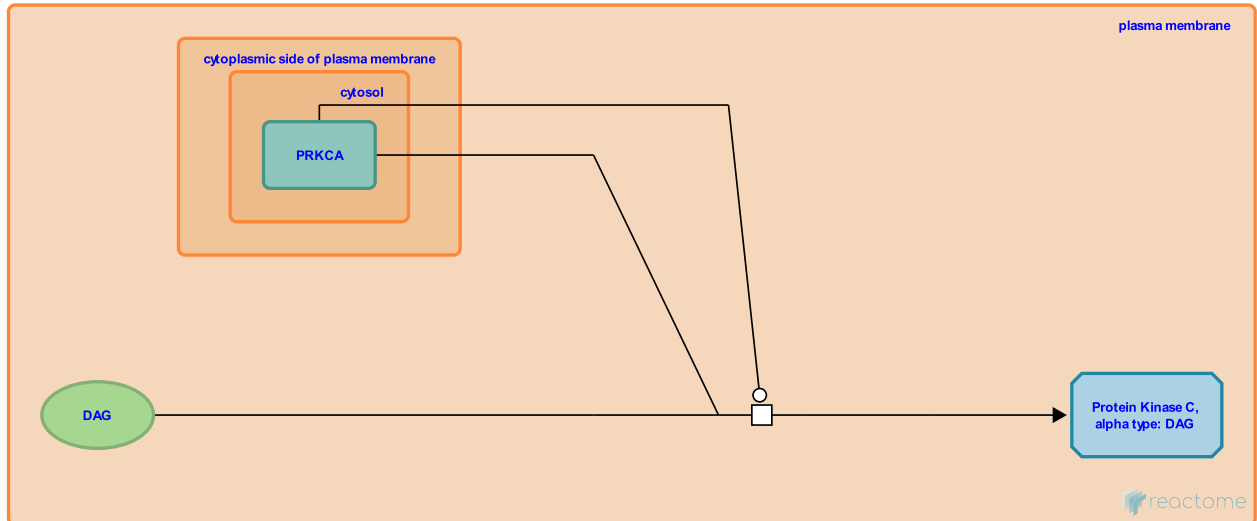
This document contains 1 reaction ([see Table of Contents](#))

Diaclycerol activates Protein kinase C, alpha type [↗](#)

Stable identifier: R-HSA-400015

Type: transition

Compartments: plasma membrane, cytosol



Diacylglycerol, produced by PLC beta-mediated PIP₂ hydrolysis in G alpha (q) signalling, remains in the plasma membrane and binds Protein Kinase C alpha (PKC-alpha), causing PKC-alpha to translocate from the cytosol to the plasma membrane. PKC-alpha is thereby activated and phosphorylates target proteins.

Literature references

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Gilon, P., Henquin, JC. (2001). Mechanisms and physiological significance of the cholinergic control of pancreatic beta-cell function. *Endocr Rev*, 22, 565-604. [↗](#)

Editions

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