

The Ligand:GPCR:Gq complex dissociates

D'Eustachio, P., Jupe, S., Varusai, TM.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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: 75

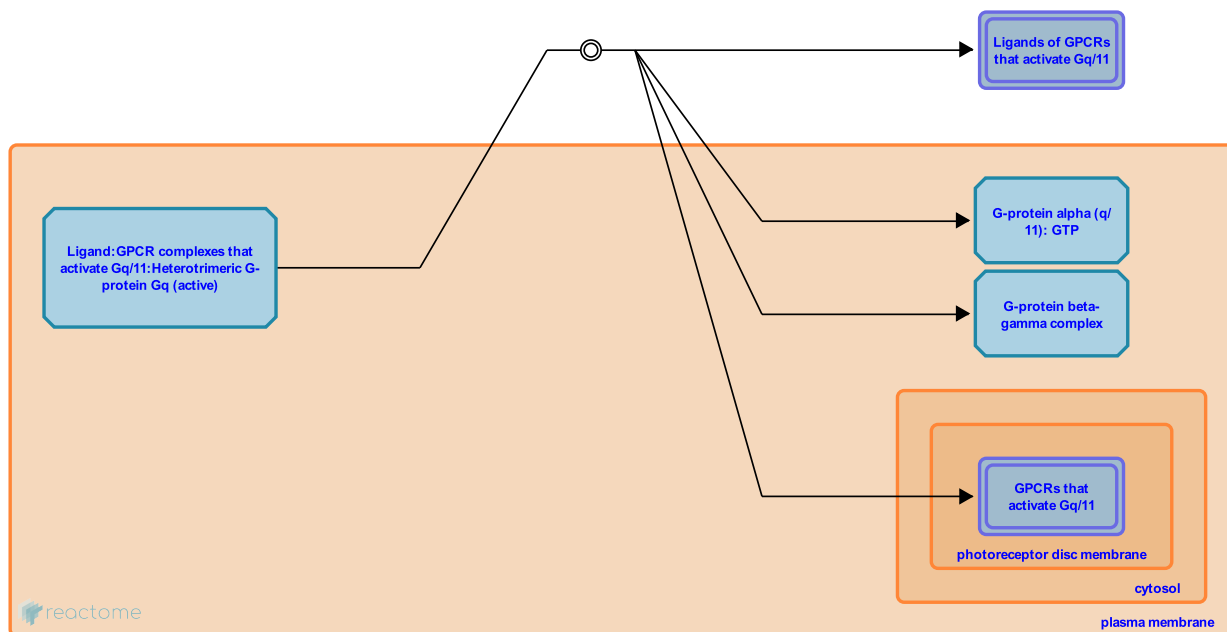
This document contains 1 reaction ([see Table of Contents](#))

The Ligand:GPCR:Gq complex dissociates ↗

Stable identifier: R-HSA-749452

Type: dissociation

Compartments: extracellular region, plasma membrane



The classical view of G-protein signalling is that the G-protein alpha subunit dissociates from the beta:gamma dimer. Activated G alpha (q) and the beta:gamma dimer then participate in separate signalling cascades. Although G protein dissociation has been contested (e.g. Bassi et al. 1996), recent in vivo experiments have demonstrated that dissociation does occur, though possibly not to completion (Lambert 2008).

Literature references

Lambert, NA. (2008). Dissociation of heterotrimeric g proteins in cells. *Sci Signal*, 1, re5. ↗

Editions

2010-05-18	Authored	Jupe, S.
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