

cGMP binds CNG channel to form cGMP:CNG channel

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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

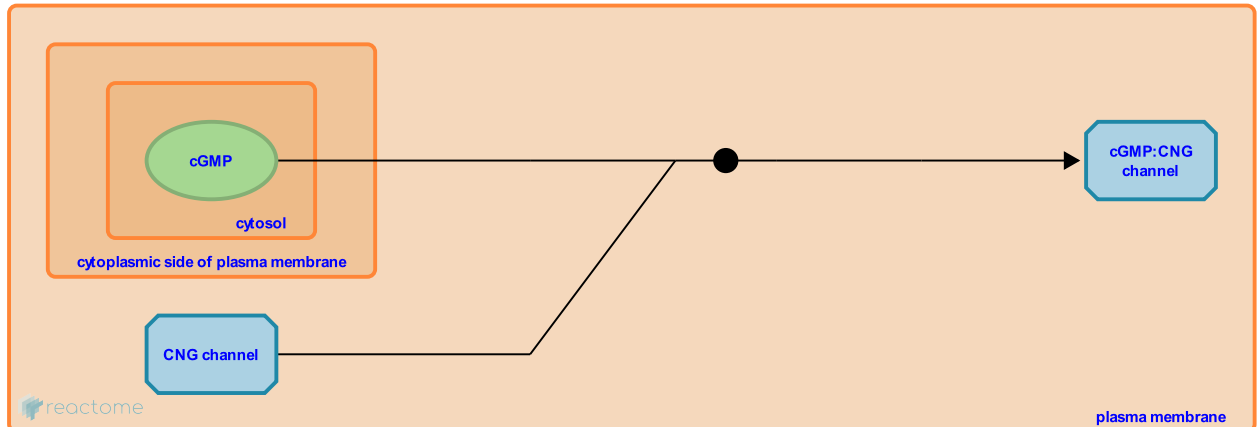
This document contains 1 reaction ([see Table of Contents](#))

cGMP binds CNG channel to form cGMP:CNG channel [↗](#)

Stable identifier: R-HSA-74031

Type: binding

Compartments: cytosol, plasma membrane



Once cGMP concentration is restored to "dark" levels, it binds cooperatively to the cGMP-gated cation channel (CNG channel), inducing opening through a conformational change in the channel (open status designated as cGMP:CNG channel here) (Chen et al 1993, Dhallan et al. 1992).

Literature references

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Peng, YW., Reed, RR., Yau, KW., Dhallan, RS., Ahamed, B., Chen, TY. (1993). A new subunit of the cyclic nucleotide-gated cation channel in retinal rods. *Nature*, 362, 764-7. [↗](#)

Editions

2003-07-11	Authored	Schmidt, EE.
2012-12-11	Edited	Jassal, B.
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