

NO binds to Guanylate Cyclase

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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: 70

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

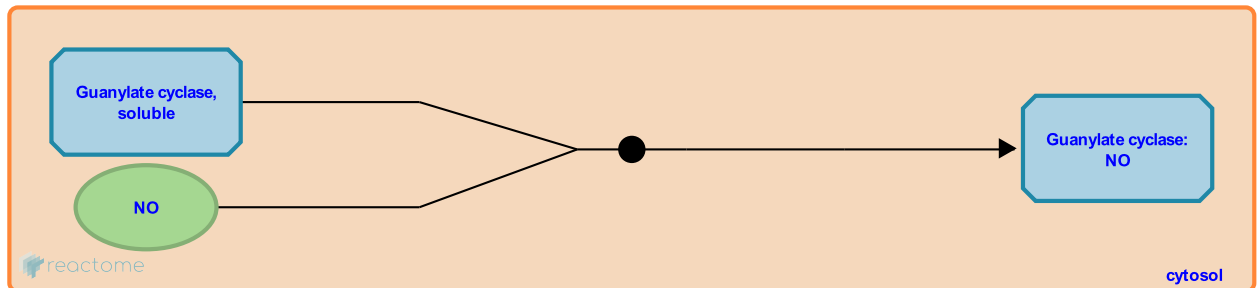
NO binds to Guanylate Cyclase ↗

Stable identifier: R-HSA-392143

Type: binding

Compartments: cytosol

Inferred from: [NO binds to Guanylate Cyclase \(Rattus norvegicus\)](#)



Soluble guanylate cyclase (sGC) is a heterodimeric hemoprotein that selectively binds Nitric Oxide (NO). NO binding stimulates the synthesis of cGMP, which then binds to phosphodiesterases (PDE), ion-gated channels, and cGMP-dependent protein kinases (cGK) to regulate several physiological functions including vasodilation, platelet aggregation and neurotransmission.

Editions

2009-06-03	Authored	Akkerman, JW.
2010-06-07	Edited	Jupe, S.
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