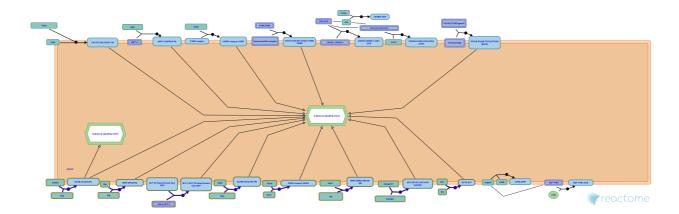


Glucagon-type ligand receptors



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

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142.

Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467.

Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res*, 46, D649-D655.

Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology, 14*, e1005968.

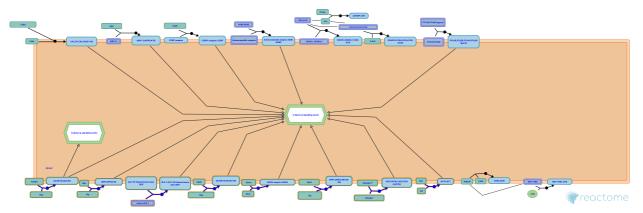
Reactome database release: 75

This document contains 1 pathway and 8 reactions (see Table of Contents)

Glucagon-type ligand receptors **→**

Stable identifier: R-RNO-420092

Inferred from: Glucagon-type ligand receptors (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

GIP receptor binds gastric inhibitory peptide 7

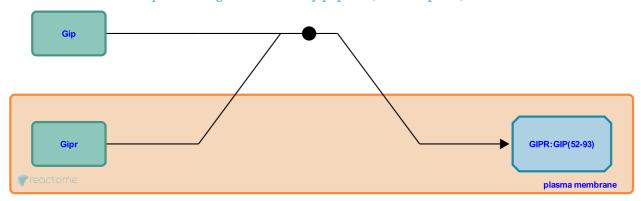
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-420274

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: GIP receptor binds gastric inhibitory peptide (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

Glucagon binds to Glucagon receptor >

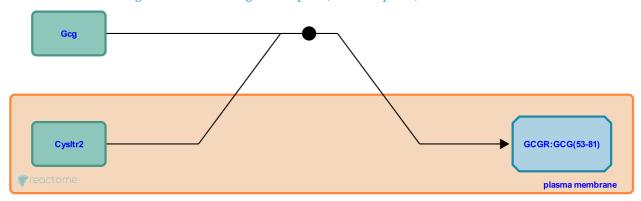
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-163625

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: Glucagon binds to Glucagon receptor (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

Glucagon-like Peptide-1 Receptor (GLP1R) binds Glucagon-like peptide-1 7

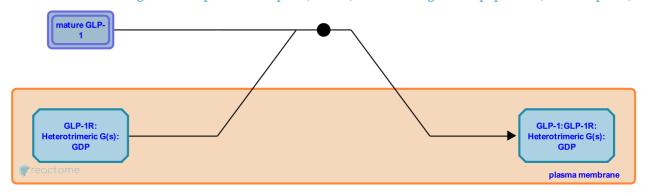
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-381612

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: Glucagon-like Peptide-1 Receptor (GLP1R) binds Glucagon-like peptide-1 (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

Glucagon-like receptor 2 binds GLP2 7

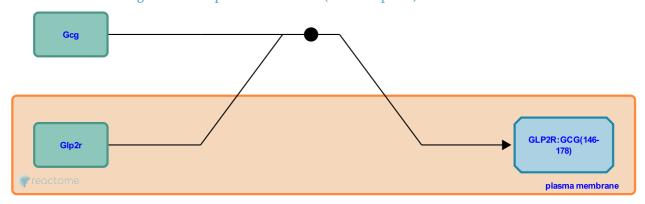
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-420123

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: Glucagon-like receptor 2 binds GLP2 (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

GHRH receptor binds GHRH 对

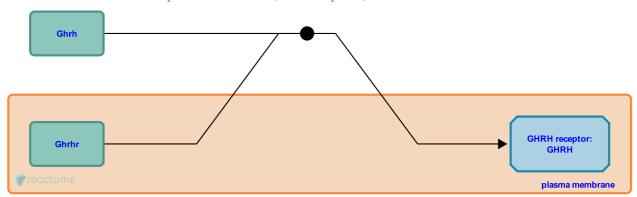
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-420243

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: GHRH receptor binds GHRH (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

VIP receptors bind VIP **↗**

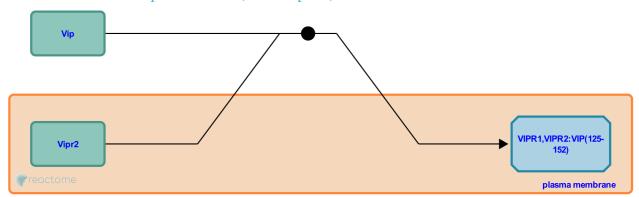
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-420233

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: VIP receptors bind VIP (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

The PACAP receptor binds PACAP >

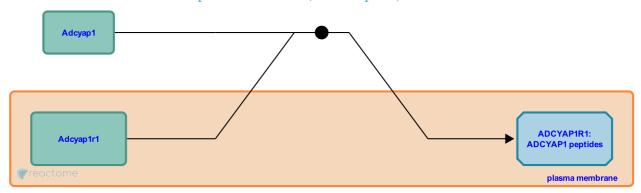
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-420131

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: The PACAP receptor binds PACAP (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

Secretin receptor binds secretin **→**

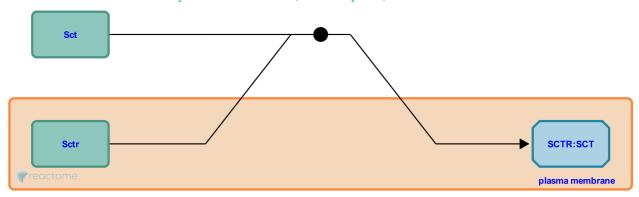
Location: Glucagon-type ligand receptors

Stable identifier: R-RNO-420202

Type: binding

Compartments: extracellular region, plasma membrane

Inferred from: Secretin receptor binds secretin (Homo sapiens)



This event has been computationally inferred from an event that has been demonstrated in another species.

The inference is based on the homology mapping from PANTHER. Briefly, reactions for which all involved PhysicalEntities (in input, output and catalyst) have a mapped orthologue/paralogue (for complexes at least 75% of components must have a mapping) are inferred to the other species. High level events are also inferred for these events to allow for easier navigation.

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