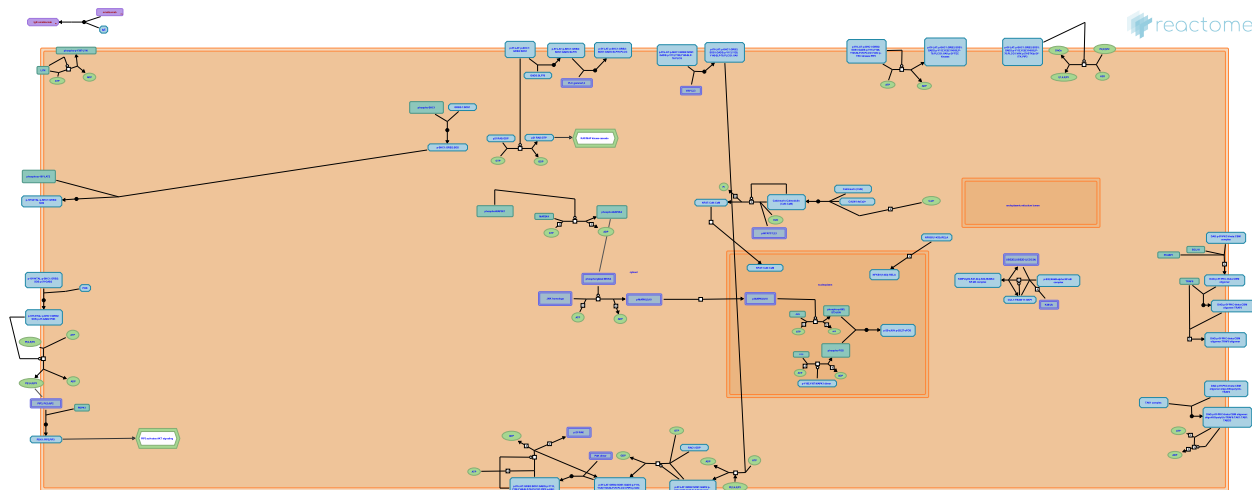


Fc epsilon receptor (FCERI) signaling



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

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This is just an excerpt of a full-length report for this pathway. To access the complete report, please download it at the [Reactome Textbook](https://reactome.org/page/about-us).

18/05/2024

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

Literature references

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Reactome database release: 88

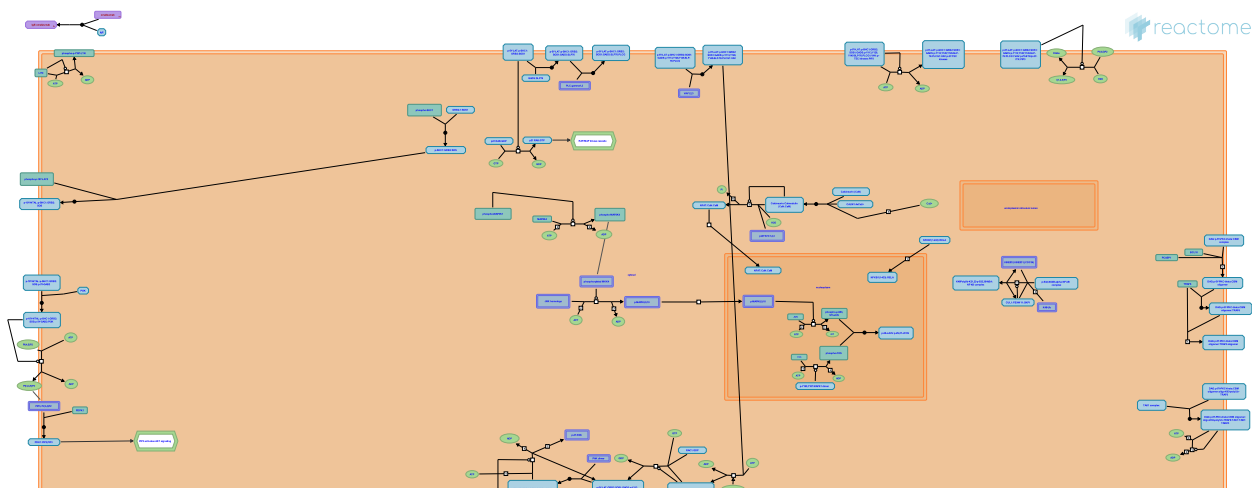
This document contains 5 pathways and 2 reactions ([see Table of Contents](#))

Fc epsilon receptor (FCERI) signaling ↗

Stable identifier: R-GGA-2454202

Compartments: plasma membrane

Inferred from: Fc epsilon receptor (FCERI) signaling (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.

[More details and caveats of the event inference in Reactome.](https://www.reactome.org) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

IgE binds omalizumab ↗

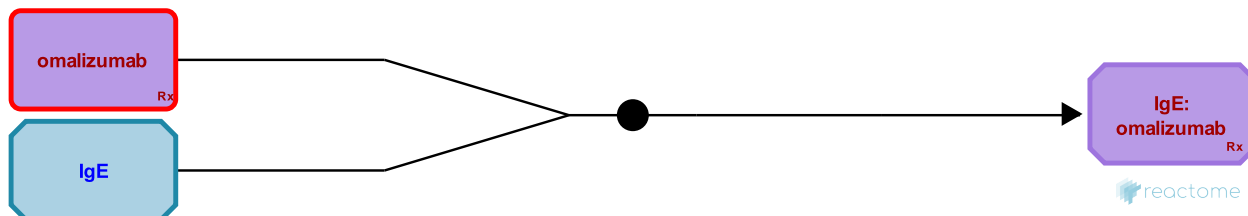
Location: [Fc epsilon receptor \(FCERI\) signaling](#)

Stable identifier: R-GGA-9724685

Type: binding

Compartments: extracellular region

Inferred from: [IgE binds omalizumab \(Homo sapiens\)](#)



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.

[More details and caveats of the event inference in Reactome.](#) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Autophosphorylation of LYN kinase ↗

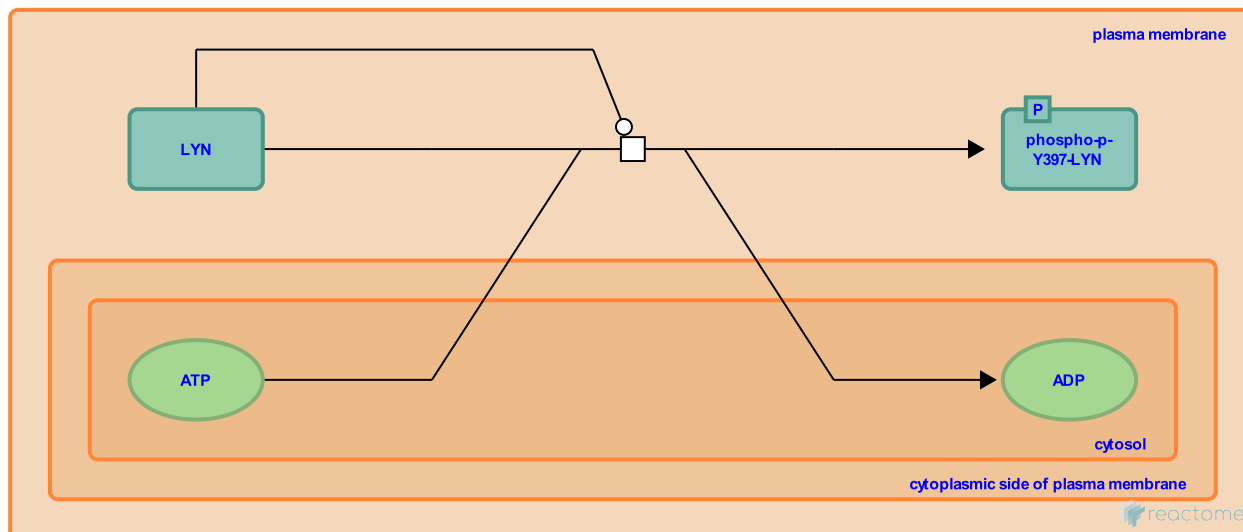
Location: Fc epsilon receptor (FCERI) signaling

Stable identifier: R-GGA-2730862

Type: transition

Compartments: plasma membrane, cytosol

Inferred from: Autophosphorylation of LYN kinase (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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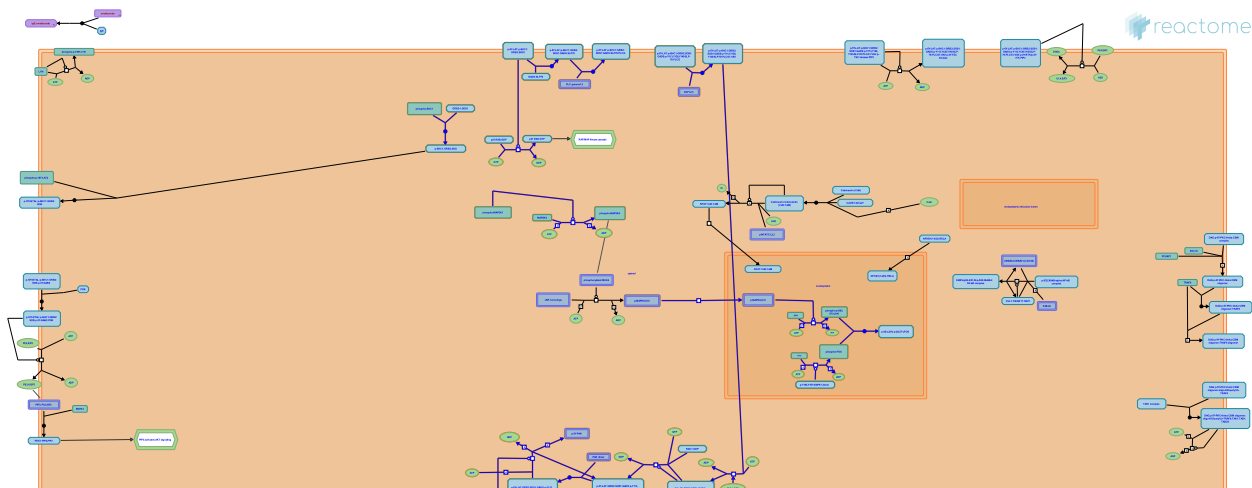
FCERI mediated MAPK activation ↗

Location: Fc epsilon receptor (FCERI) signaling

Stable identifier: R-GGA-2871796

Compartments: plasma membrane, nucleoplasm, cytosol

Inferred from: FCERI mediated MAPK activation (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.

[More details and caveats of the event inference in Reactome.](http://www.pantherdb.org/about.jsp) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

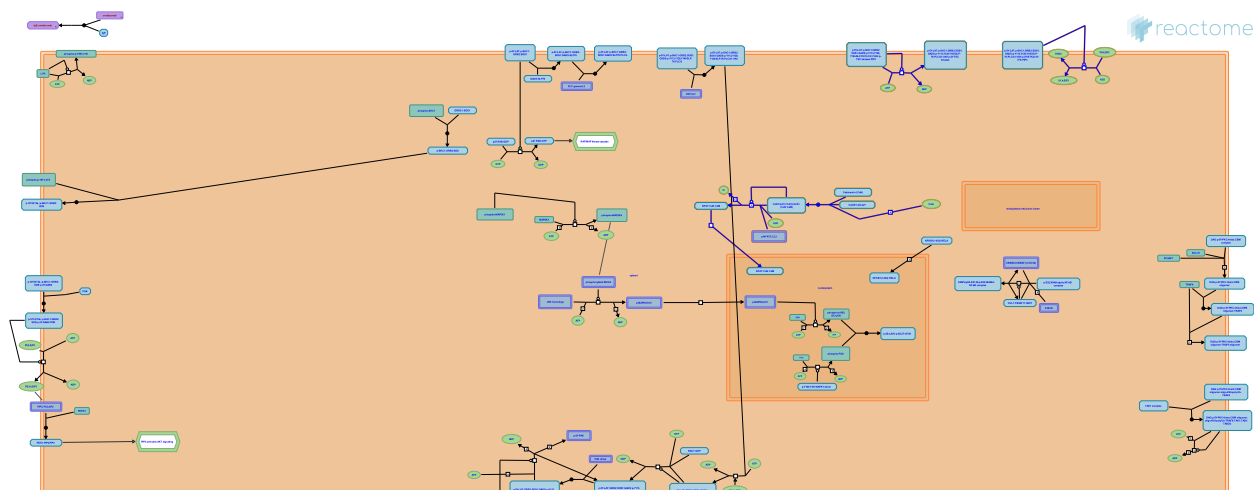
FCERI mediated Ca²⁺ mobilization ↗

Location: Fc epsilon receptor (FCERI) signaling

Stable identifier: R-GGA-2871809

Compartments: nucleoplasm, plasma membrane, cytosol

Inferred from: FCERI mediated Ca²⁺ mobilization (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.

[More details and caveats of the event inference in Reactome.](http://www.pantherdb.org/about.jsp) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

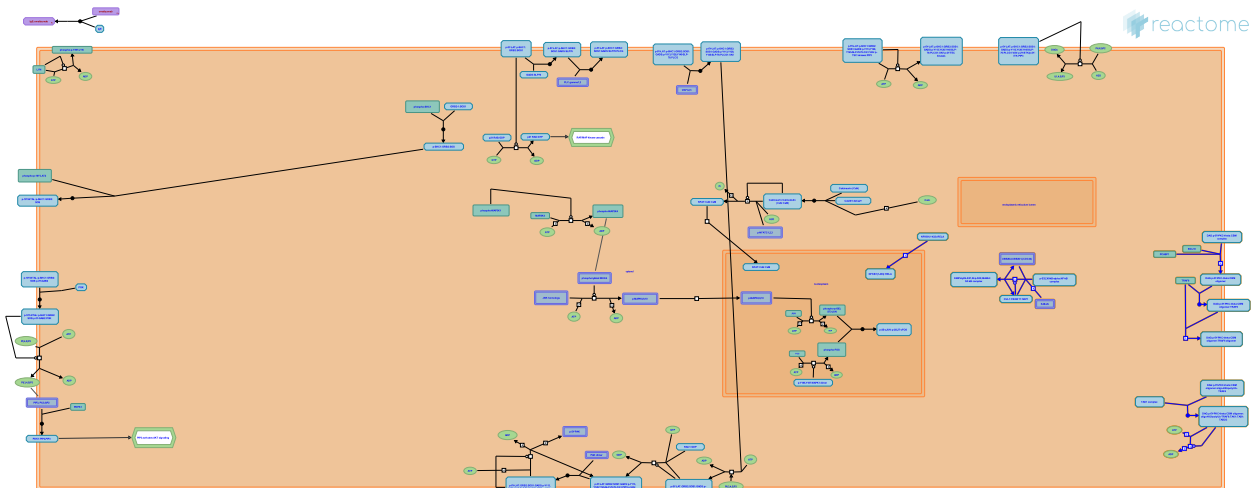
FCERI mediated NF-kB activation [↗](#)

Location: Fc epsilon receptor (FCER1) signaling

Stable identifier: R-GGA-2871837

Compartments: plasma membrane, nucleoplasm, cytosol

Inferred from: FCERI mediated NF-kB activation (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/parologue (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.

[More details and caveats of the event inference in Reactome.](http://www.pantherdb.org/about.jsp) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

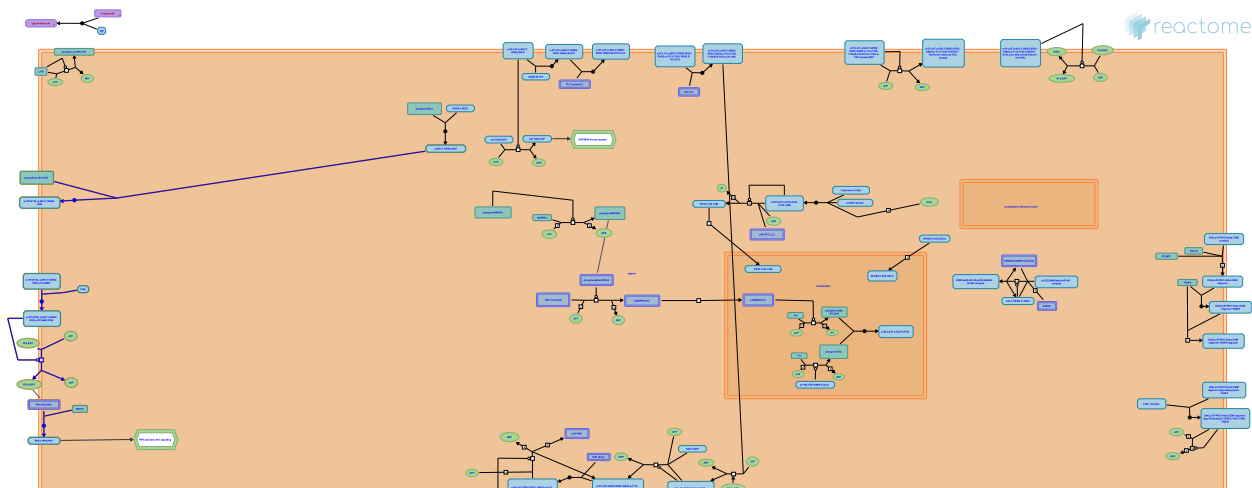
Role of LAT2/NTAL/LAB on calcium mobilization ↗

Location: Fc epsilon receptor (FCERI) signaling

Stable identifier: R-GGA-2730905

Compartments: plasma membrane, cytosol

Inferred from: Role of LAT2/NTAL/LAB on calcium mobilization (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.

[More details and caveats of the event inference in Reactome.](http://www.pantherdb.org/about.jsp) For details on PANTHER see also: <http://www.pantherdb.org/about.jsp>

Table of Contents

Introduction	1
❏ Fc epsilon receptor (FCERI) signaling	2
↳ IgE binds omalizumab	3
↳ Autophosphorylation of LYN kinase	4
❏ FCERI mediated MAPK activation	5
❏ FCERI mediated Ca+2 mobilization	6
❏ FCERI mediated NF-kB activation	7
❏ Role of LAT2/NTAL/LAB on calcium mobilization	8
Table of Contents	9