Phosphorylated BTK phosphorylates PLCG2

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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.

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


Reactome database release: 83

This document contains 1 reaction *(see Table of Contents)*

https://reactome.org
Activated BTK (BTK phosphorylated on tyrosine-551 and tyrosine-223) bound to phosphorylated BLNK phosphorylates phospholipase gamma-2 (PKCG2) on tyrosines 753, 759, and 1217 (Rodriguez et al. 2001 and inferred from the rat homolog) thereby activating PLCG2 to hydrolyze phosphatidylinositol 4,5-bisphosphate, yielding the second messengers diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) (Carter et al. 1991, Roifman and Wang 1992, Kim et al. 2004, Sekiya et al. 2004). PLCG2 also binds phosphoinositol 3,4,5-trisphosphate (PIP3) produced by PI3K at the plasma membrane.

**Literature references**


**Editions**

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<td>2018-04-14</td>
<td>Authored, Edited</td>
<td>May, B.</td>
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<tr>
<td>2018-07-18</td>
<td>Reviewed</td>
<td>Wienands, J.</td>
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