

Phosphorylation of pChREBP (Thr 653) at Ser(196) by PKA

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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: 88

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

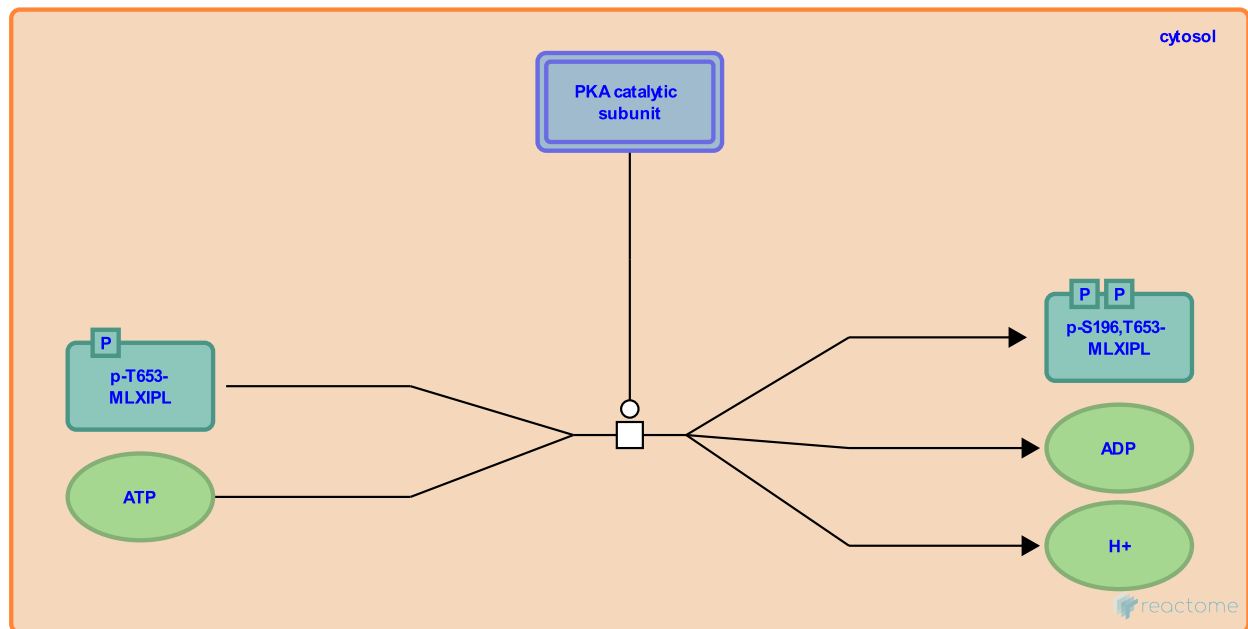
Phosphorylation of pChREBP (Thr 653) at Ser(196) by PKA ↗

Stable identifier: R-HSA-163676

Type: transition

Compartments: cytosol

Inferred from: [Phosphorylation of mpChREBP \(Thr 666\) at Ser\(196\) by mPKA \(Mus musculus\)](#)



Phosphorylation of ChREBP (Carbohydrate Response Element Binding Protein) at serine 196 by PKA inhibits its nuclear translocation. This reaction has been studied in detail using mouse proteins (Kawaguchi et al. 2001); the human version of the reaction is inferred from these studies.

Editions

2005-05-13	Authored	Gopinathrao, G.
2024-02-12	Reviewed	Hill, DP.