

Calpain activation

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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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Reactome database release: 88

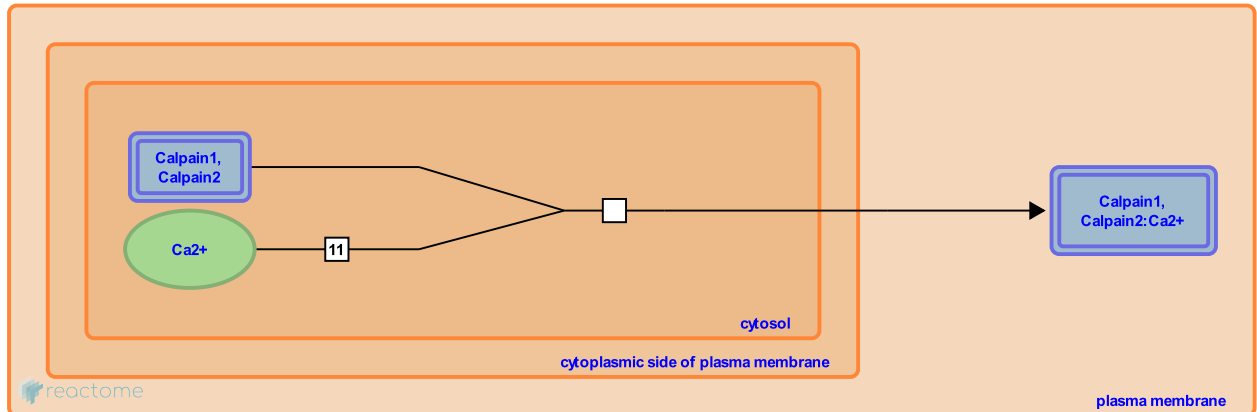
This document contains 1 reaction ([see Table of Contents](#))

Calpain activation [↗](#)

Stable identifier: R-HSA-8863008

Type: transition

Compartments: cytosol



Binding of calcium ions to the calpain dimer composed of the calpain catalytic subunit of 80 kDa and a calpain regulatory subunit of 30 kDa enables conformation change that results in formation of a functional catalytic center and also promotes relocation of the calpain complex to the plasma membrane (Lin et al. 1997, Strobl et al. 2000, Schad et al. 2002). Calpain complexes involving the neuronally expressed mu-calpain (CAPN1) and m-calpain (CAPN2) catalytic subunits (Lee et al. 2000) are shown in this activation reaction.

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Editions

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