

Activation of Ca²⁺ activated Potassium channels with Intermediate conductance

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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

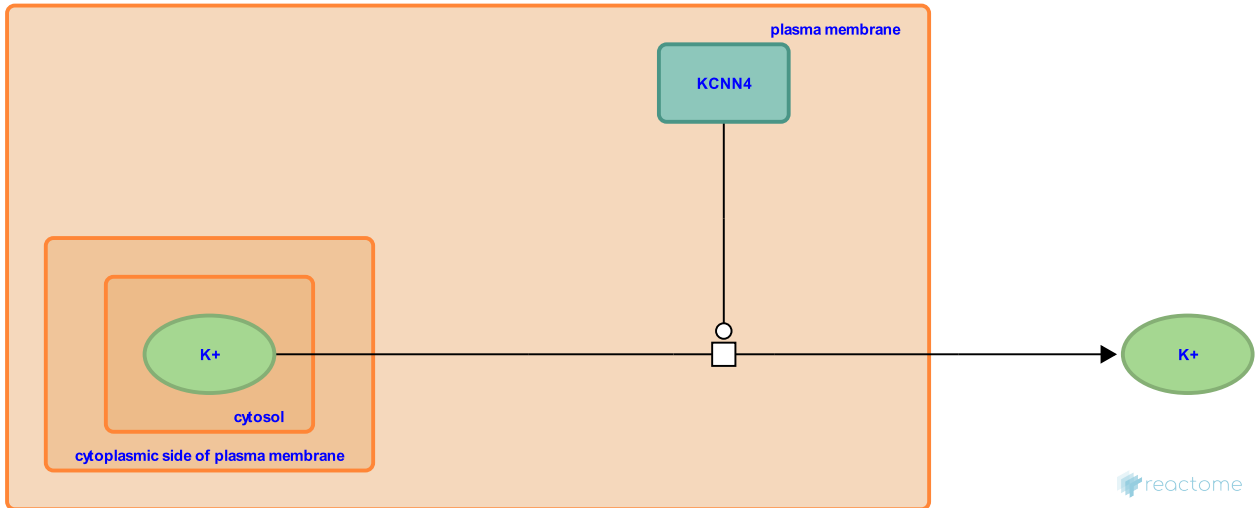
This document contains 1 reaction ([see Table of Contents](#))

Activation of Ca²⁺ activated Potassium channels with Intermediate conductance [↗](#)

Stable identifier: R-HSA-1296035

Type: transition

Compartments: plasma membrane, cytosol, extracellular region



Intermediate conductance K⁺ channels are restricted to non neuronal tissues like epithelia, blood cells and are activated by intracellular Ca²⁺ ion concentration. Activation of Ca²⁺ activated K⁺ channels with intermediate conductance leads to K⁺ efflux in to the extracellular space.

Literature references

Hill, MA., Ella, S., Braun, AP., Sheng, JZ., Davis, MJ. (2009). Openers of SKCa and IKCa channels enhance agonist-evoked endothelial nitric oxide synthesis and arteriolar vasodilation. *FASEB J*, 23, 1138-45. [↗](#)

Editions

2010-09-23	Reviewed	Jassal, B.
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