

KCNH2:KCNE transport K⁺ from cytosol to extracellular region

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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

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Reactome database release: 88

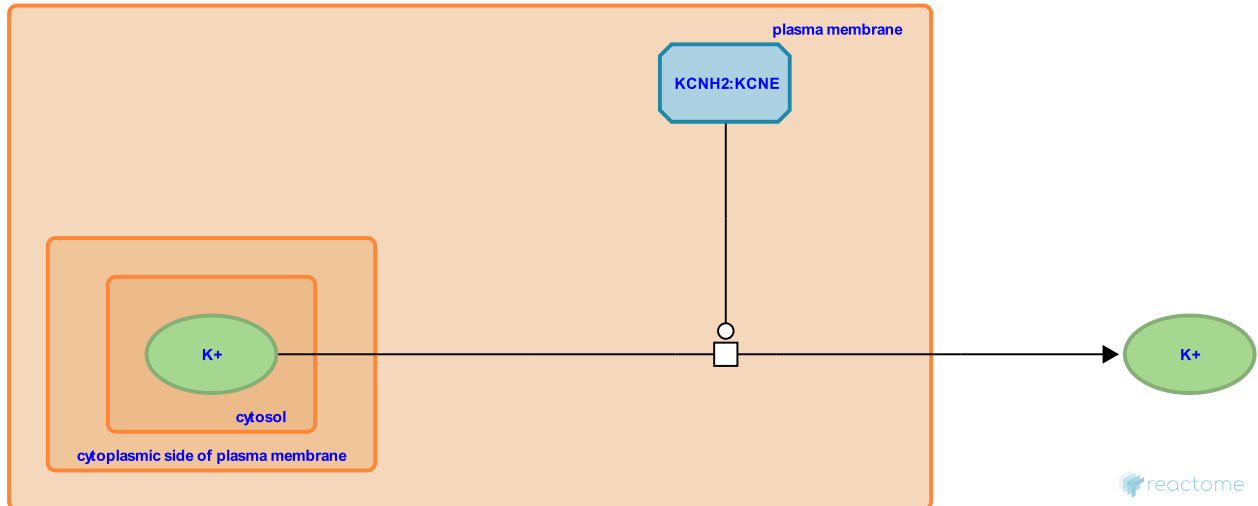
This document contains 1 reaction ([see Table of Contents](#))

KCNH2:KCNE transport K⁺ from cytosol to extracellular region ↗

Stable identifier: R-HSA-5577237

Type: transition

Compartments: cytosol, extracellular region, plasma membrane



Two potassium currents, I_{K_S} and I_{K_R} , provide the principal repolarising currents in cardiac myocytes for the termination of action potentials. The potassium voltage-gated channel subfamily H member 2 (KCNH2 aka HERG) is the pore-forming alpha subunit of a stable complex with a regulating beta subunit of the potassium voltage-gated channel subfamily E family (KCNE). This stable complex creates the I_{K_R} current by the efflux of K⁺ (Macdonald et al. 1997, Abbott et al. 1999).

Literature references

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Editions

2014-06-05	Authored, Edited	Jassal, B.
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