Nephrin trans-homophilic interaction

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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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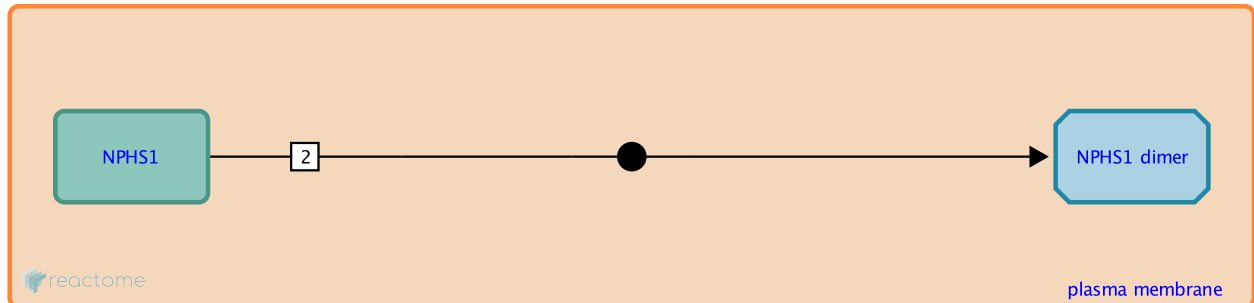
Reactome database release: 77

This document contains 1 reaction ()

Nephrin trans-homophilic interaction ↗

Stable identifier: R-HSA-373732

Type: binding

Compartments: plasma membrane

Foot processes are slender, actin rich protrusions of the cytoplasm that are anchored to the glomerular basement membrane. Adjacent foot processes are laterally interconnected by a highly specialized cell-cell junction, the slit diaphragm (SD). Nephrin (NPHS1) is the critical structural component within the slit diaphragm. Nephrin molecules of adjacent foot processes from neighboring podocytes interact with each other in the middle of the slit diaphragm forming a filter with a zipper like structure and with pores just the size of albumin on both sides of the midline density.

Literature references

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Editions

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