

# p85 associates with both p-Nephrin and CD2AP

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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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Stable identifier: R-HSA-451758

Type: binding

#### Compartments: plasma membrane

Inferred from: p85 associates with both p-Nephrin and CD2AP (Rattus norvegicus)



The regulatory p85 subunit of PI3K recognizes and binds to both phosphorylated nephrin and its binding partner, CD2AP. By mutation analysis, nephrin Y1158 was shown to be necessary for the interaction. This interaction allows the catalytic subunit p110 to act on phospholipids of the inner leaflet of the cell membrane. This leads to downstream phosphorylation and inactivation of the apoptotic factor Bad via the serine-threonine kinase AKT.

#### **Editions**

2008-02-26	Authored	de Bono, B., Garapati, P V.
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