

NOTCH3 binds DLL4

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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: 82

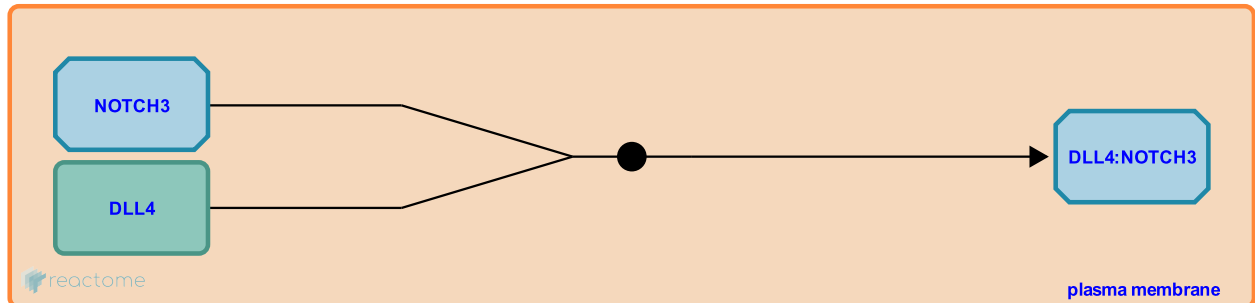
This document contains 1 reaction ([see Table of Contents](#))

NOTCH3 binds DLL4 [↗](#)

Stable identifier: R-HSA-2168136

Type: binding

Compartments: plasma membrane



Binding of NOTCH3 receptor to DLL4 ligand has not been directly demonstrated. DLL4 and NOTCH3 are expressed on neighboring cells in retina (Claxton and Fruttiger 2004) and in endothelium/blood (Indraccolo et al. 2009), and DLL4 significantly and specifically increases NOTCH3 signaling (Indraccolo et al. 2009).

Literature references

Claxton, S., Fruttiger, M. (2004). Periodic Delta-like 4 expression in developing retinal arteries. *Gene Expr Patterns*, 5, 123-7. [↗](#)

Pusceddu, I., Mecarozzi, M., Indraccolo, S., Amadori, A., Masiero, M., Minuzzo, S. et al. (2009). Cross-talk between tumor and endothelial cells involving the Notch3-Dll4 interaction marks escape from tumor dormancy. *Cancer Res*, 69, 1314-23. [↗](#)

Editions

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