

Neogenin:Netrin-3 binds CDO complex

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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

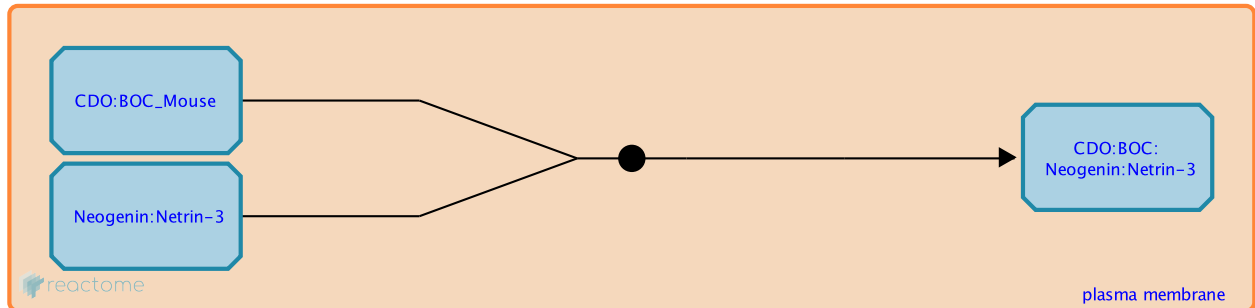
This document contains 1 reaction ([see Table of Contents](#))

Neogenin:Netrin-3 binds CDO complex [↗](#)

Stable identifier: R-MMU-449201

Type: binding

Compartments: plasma membrane



CDO selectively binds to neogenin in a cis fashion and this interaction involves extracellular domains of both proteins. CDO is essential in mediating netrin-3-induced differentiation of myoblasts by neogenin. Neogenin and netrin-3 stimulate myotube formation and enhance myogenic bHLH-and NFAT-dependent transcription.

Literature references

Bae, GU., Yang, YJ., Jiang, G., Hong, M., Lee, HJ., Tessier-Lavigne, M. et al. (2009). Neogenin regulates skeletal myofiber size and focal adhesion kinase and extracellular signal-regulated kinase activities in vivo and in vitro. *Mol Biol Cell*, 20, 4920-31. [↗](#)

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Kang, JS., Yi, MJ., Zhang, W., Feinleib, JL., Cole, F., Krauss, RS. (2004). Netrins and neogenin promote myotube formation. *J Cell Biol*, 167, 493-504. [↗](#)

Editions

2008-08-11	Authored, Edited	Garapati, P V.
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