

RAD51B binds RAD51C

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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

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142. [↗](#)

Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)

Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res*, 46, D649-D655. [↗](#)

Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

Reactome database release: 88

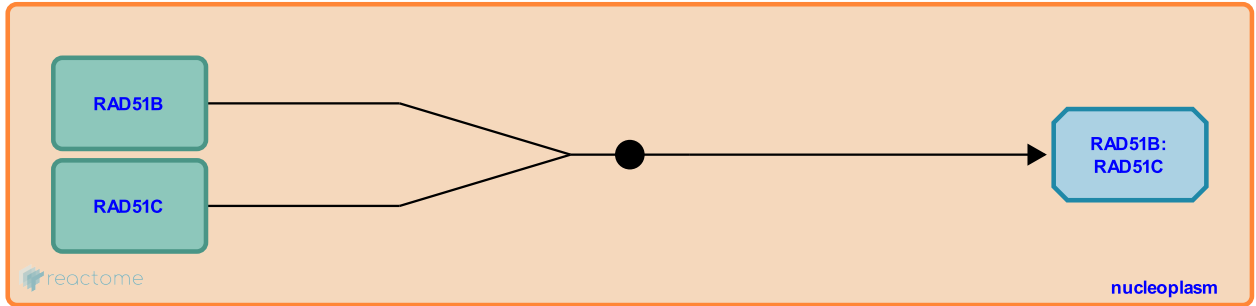
This document contains 1 reaction ([see Table of Contents](#))

RAD51B binds RAD51C ↗

Stable identifier: R-HSA-983285

Type: binding

Compartments: nucleoplasm



The Rad51-like proteins Rad51B and Rad51C form a highly stable complex. This complex assists Rad51 in the early stages of homologous recombination.

Literature references

Clark, R., Miller, KA., Yoshikawa, DM., Schild, D., Albala, JS., McConnell, IR. (2002). RAD51C interacts with RAD51B and is central to a larger protein complex in vivo exclusive of RAD51. *J Biol Chem*, 277, 8406-11. ↗

Lio, YC., Chen, DJ., Mazin, AV., Kowalczykowski, SC. (2003). Complex formation by the human Rad51B and Rad51C DNA repair proteins and their activities in vitro. *J Biol Chem*, 278, 2469-78. ↗

Editions

2010-10-29	Authored	Akkerman, JW.
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