Formation of RAD50:MRE11 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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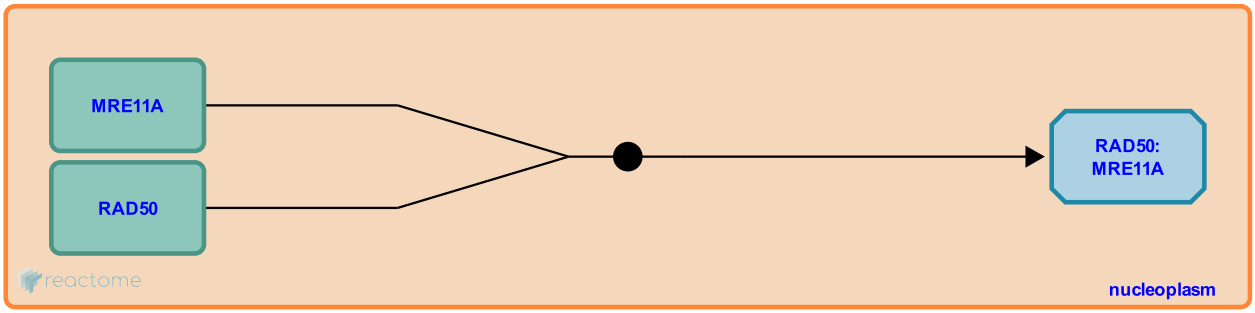
Stable identifier: R-HSA-75172

Type: binding

Compartments: nucleoplasm



MRE11 has both manganese dependent ssDNA 3'->5' exonuclease and endonuclease activities. MRE11 associates with RAD50, resulting in increased 3'-5' exonuclease activity (Dolganov et al. 1996, Paull and Gellert 1998).

Literature references

Paull, TT., Gellert, M. (1998). The 3' to 5' exonuclease activity of Mre 11 facilitates repair of DNA double-strand breaks . *Mol Cell, 1*, 969-79. ↗

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Editions

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