CARM1 binds TBP:TFIIA:DDX5:ESR1:estrogen:TFF1 gene

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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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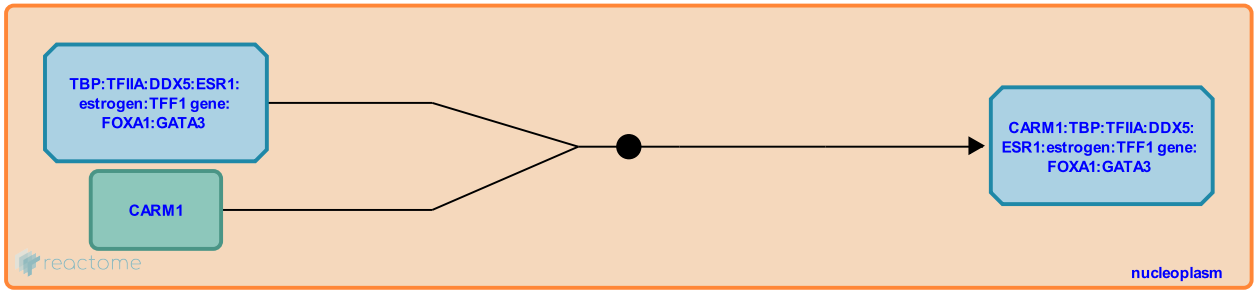
Stable identifier: R-HSA-9009526

Type: binding

Compartments: nucleoplasm



CARM1 is an H3 R17 methyltransferase that is recruited to the TFF promoter where, in conjunction with acetyltransferases, it establishes transcriptionally active chromatin (Métivier et al, 2003; Chen et al, 2000; Daujat et al, 2002). PRMT1 is an alternate arginine methyltransferase with activity toward H4 R3 that acts at the TFF enhancer, however CARM1 and PRMT1 are never found simultaneously at the TFF1 gene (Métivier et al, 2003; reviewed in Xu et al, 2003; Arnal et al, 2017).Note that in this diagram, methylation of H3 R17 is not depicted.

Literature references

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Editions

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