

Estrogen stimulates dimerization of plasma membrane estrogen receptors

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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: 75

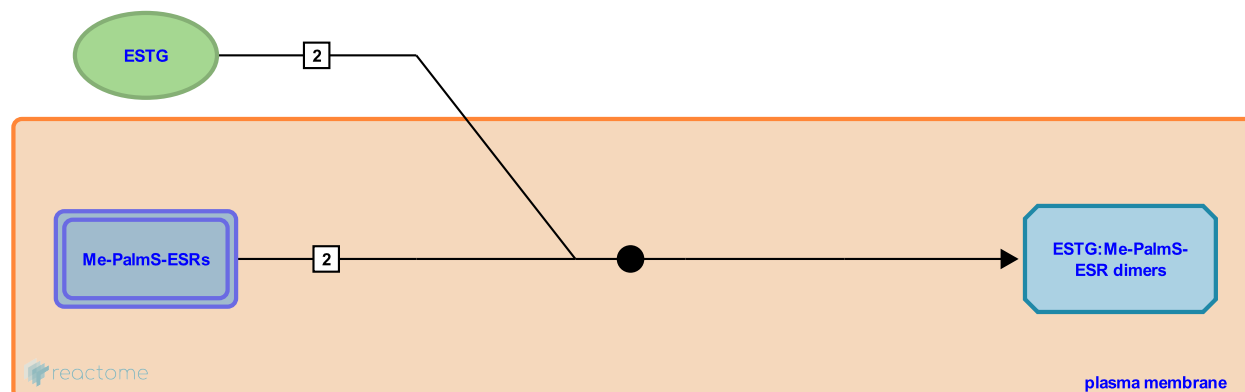
This document contains 1 reaction ([see Table of Contents](#))

Estrogen stimulates dimerization of plasma membrane estrogen receptors [↗](#)

Stable identifier: R-HSA-9021170

Type: binding

Compartments: plasma membrane



Plasma membrane-localized estrogen receptors signal as dimers, and dimerization is promoted by stimulation with estrogen (Razandi et al, 2004). Because palmitoylation of cytoplasmic estrogen receptors occurs on the monomeric form, estrogen (ESTG) stimulation restricts both the amount of palmitoylated receptor and its localization at the plasma membrane (Acconcia et al, 2005; Razandi et al, 2010; Pedram et al, 2012). This may serve to limit the extent of the rapid response to estrogen stimulation.

Literature references

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Editions

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