

综述

胞膜雌激素受体信号通路与乳腺癌的关系

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摘要

雌激素通过分布于细胞膜的雌激素结合蛋白, 激活细胞内信号级联放大反应, 从而改变胞内蛋白功能和调控基因表达, 此为雌激素非基因组作用模式或称膜启动的雌激素应答。雌激素基因组与非基因组作用的交叉对话在调控转录中有重要意义。在人类乳腺癌的发生、发展和转化过程中, 除由雌激素诱导的核内事件外, 膜启动的雌激素应答同样影响细胞的增殖与凋亡机制。

关键词 [雌激素膜受体](#); [信号通路](#); [非基因组效应](#); [乳腺癌](#)

分类号

Membrane initiated estrogen signaling pathway in breast cancer

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Abstract

Estrogen-triggered signaling cascades via a plasma membrane-associated form of the receptor, can lead both to altered functions of proteins in the cytoplasm and to regulation of gene expression, which referred as nongenomic actions of estrogens or membrane-initiated estrogen responses. Cross-talk occurs between these membrane-initiated and nuclear responses, regulating transcriptional activation. Estrogen plays a role in initiation, development, and progression of most human breast cancers. In addition to the important nuclear events induced by estrogen, it has now become clear that rapid membrane-initiated responses also affect cellular proliferation and apoptotic mechanisms.

Key words [estrogen membrane receptor](#) [signal pathway](#) [non-genomic effect](#) [breast cancer](#)

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