LOX家族在肿瘤中的研究进展

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Title: Progress in research of LOX family in tumor

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摘要: 赖氨酰氧化酶（LOX）家族是一组细胞外铜依赖性胺氧化酶，主要作用是共价交联胶原蛋白和弹性蛋白，维持细胞外基质的正常结构和功能。近年来的研究显示，LOX还可通过促进上皮-间质转化（EMT）、激活FAK信号通路、参与转移前微环境形成等促进肿瘤细胞迁移和侵袭，在肿瘤的发生发展及转移等过程中具有重要的作用，有望成为肿瘤治疗的潜在靶点。本文拟从LOX家族的结构与调控、在肿瘤中的表达及作用机制等方面进行综述，以全面了解LOX家族的研究现状。

Abstract: The lysyl oxidase (LOX) family is a group of extracellular copper-dependent amine oxidases.The main role of LOX family is covalently cross-linking collagen and elastin and maintaining the normal structure and function of extracellular matrix.Recent studies have shown that LOX can also promote migration and invasion of tumor cells by promoting EMT，activating FAK signaling pathways，and participating in the formation of pre-metastatic microenvironment.It plays an important role in the development and metastasis of tumors and is expected to become a potential target for cancer treatment.This article intends to review the structure and regulation of the LOX family，its expression in tumors and its mechanism in order to fully understand the research status of the LOX family.

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