DENN/MADD 域内含蛋白 2D与非小细胞肺癌相关研究进展

Title:	DENN/MADD domain containing 2D and non-small cell lung cancer-related research progress

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摘要: 近年来的研究显示，DENN/MADD 域内含蛋白 2D（DENND2D）作为一种抑癌基因，其过表达可以诱导细胞凋亡，从而显著地抑制肿瘤细胞在体外和体内的增殖。其机制为DENND2D通过对PARP的剪切使凋亡标志物cleaved PARP 表达增高，以及竞争性抑制MADD与肿瘤细胞死亡结构域的结合等。而在非小细胞肺癌（non-small cell lung cancer，NSCLC）患者肿瘤细胞中DENND2D呈低表达状态，这种低表达的出现则与肿瘤细胞染色体1号染色体短臂丢失、microRNA-522阻止DENND2D mRNA的翻译及DENND2D启动子可能存在过度甲基化有关。

Abstract: In recent years，researches showed that over expression of DENN/MADD domain containing 2D(DENND2D)，a tumor suppressor-like gene，significantly suppressed the proliferation of tumor cells in vitro and in vivo by inducing apoptosis.The mechanism is that DENND2D increases cleaved PARP expression by cutting PARP，and competitively inhibits the binding of MADD to the tumor cell death domain.In the meantime，downregulation of DENND2D in non-small cell lung cancer（NSCLC） cell was found.This low expression is associated with loss of the short arm on chromosome 1 of the tumor cell，the translation of DENND2D mRNA by microRNA-522 and the possible hypermethylation of the DENND2D promoter.

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备注/Memo: -

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