

论著

## 程序性细胞死亡因子4在胰腺癌组织中的表达及临床病理学意义

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**摘要** 摘要: 目的 探讨胰腺癌组织中程序性细胞死亡因子4(PDCD4)的表达及临床病理学意义。方法 采用免疫组织化学方法检测69例胰腺癌石蜡标本中PDCD4表达, 同时采用Western印迹杂交方法检测其中8例冷冻保存的新鲜胰腺癌及癌旁正常胰腺组织中PDCD4蛋白的表达情况, 观察其与胰腺癌患者临床病理学参数之间的关系。结果 Western印迹分析结果显示, 同癌旁正常胰腺组织相比, 8例胰腺癌组织中PDCD4蛋白表达均明显减弱或缺失。69例胰腺癌中, PDCD4低表达(阳性细胞数 < 30%)者占52.2%。其中, 在中、低分化腺癌中, PDCD4低表达者分别为67.4%(15/23)和70%(14/20), 而高分化腺癌仅有26.9%(7/26)为低表达。相关分析显示, PDCD4表达减弱或缺失与胰腺癌的不良分化相关( $P < 0.01$ ), 而与患者的性别、年龄、肿瘤部位和TNM分期无关。结论 PDCD4蛋白在胰腺癌中多呈低表达, 并与胰腺癌的分化程度相关, 其在胰腺癌的发生、发展过程中可能起重要作用。

**关键词** [胰腺癌](#) [程序性细胞死亡因子4](#) [免疫组织化学](#)

分类号

## Expression of Programmed Cell Death 4 and Its Clinicopathological Significance in Human Pancreatic Cancer

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**Abstract** Abstract: Objective To investigate the expression of programmed cell death 4(PDCD4) protein and its clinicopathological significance in human pancreatic cancer. Methods Immunohistochemistry was used to examine the expression of PDCD4 protein in 69 specimens of pancreatic cancer and Western blot in 8 fresh specimens. Results The expression of PDCD4 protein was significantly lower in all 8 fresh pancreatic cancer tissues than that in non-cancerous tissues detected by Western blot. Compared with non-cancerous pancreatic tissue (> 80% of positive cells), low PDCD4 expression was shown in 69 pancreatic cancer tissues (< 30% of positive cells in 36 cases and 30%–80% of positive expression cells in 33 cases). In the 33 cases with 30% and 80% of positive expression cells, the expression rates of PDCD4 protein were 57.6%, 24.2%, and 18.2% in well, moderately, and poorly differentiated cancers, respectively. In the 36 cases less than 30% of positive expression cells, however, the expression rate of PDCD4 protein in well, moderately, and poorly differentiated cases were 19.4%, 41.7%, and 38.9%, respectively. 67.4%(15/23) of the

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moderately differentiated cases and 70%(14/20) of the poorly differentiated cases showed <30% of positive expression cells. Only 26.9%(7/26) of the well differentiated cases, however, showed <30% of positive expression cells, indicating that low PDCD4 expression was associated with histological grade ( $P < 0.01$ ). There was no relationship between PDCD4 expression and other clinicopathological parameters including patients' sex, age, and TNM stage. Conclusions Expression of PDCD4 protein is low in human pancreatic cancer and is correlated with the differentiation levels of human pancreatic cancer. PDCD4 may play an important role in the occurrence and development of pancreatic carcinomas.

**Key words** [pancreatic carcinoma](#) [programmed cell death 4](#) [immunohistochemistry](#)

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