

# HDAC2在肝细胞肝癌中对MMP9表达的影响

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**Title:** The impact of HDAC2 on MMP9 expression in hepatocellular carcinoma

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**关键词:** 组蛋白去乙酰化酶2; 基质金属蛋白酶9; 肝细胞肝癌; 肿瘤转移

**Keywords:** histone deacetylase 2; matrix metalloproteinase 9; hepatocellular carcinoma; tumor metastasis

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**摘要:** 目的: 明确组蛋白去乙酰化酶2(HDAC2)在肝细胞肝癌(HCC)中对基质金属蛋白酶9 (MMP9) 表达的影响。方法: 利用mRNA表达谱芯片数据进行统计分析, 确定HDAC2和MMP9的mRNA在HCC组织中的表达情况及相关性; 实时定量PCR检测HDAC2过表达对MMP9转录的影响; 蛋白免疫印迹检测HDAC2过表达对MMP9蛋白表达的影响。结果: HDAC2和MMP9的mRNA在HCC肿瘤组织中均表达升高并呈正相关性; 在HepG2细胞中, HDAC2促进MMP9的转录及蛋白表达。结论: HDAC2在HCC中促进MMP9的表达, 可能在HCC转移过程中发挥作用。

**Abstract:** Objective: To evaluate the impact of HDAC2 on MMP9 expression in hepatocellular carcinoma (HCC).Methods: The expressions of HDAC2 and MMP9 in HCC tissues were evaluated with microarray data, and their correlation was analyzed.Real-time PCR was performed to detect the effect of HDAC2 overexpression on mRNA level of MMP9.Western Blot was used to detect the effect of HDAC2 overexpression on protein level of MMP9.Results: Both HDAC2 and MMP9 were higher expressed in HCC tissues, compared with that in normal liver tissues.There was a positive correlation between HDAC2 expression and MMP9 expression.In HepG2 cells, overexpression of HDAC2 increased both mRNA and protein expression of MMP9.Conclusion: HDAC2 promotes MMP9 expression in HCC, which may be involved in tumor metastasis of HCC.

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