



[首页](#)

[期刊概况](#)

[编委会](#)

[期刊内容](#)

[特邀审稿](#)

[投稿指南](#)

[出版发行](#)

306~310. 大规模平行测序技术筛选人肾细胞癌组织中差异表达microRNAs及其验证[J]. 翟庆娜,周亮,余振东,唐爱发,王勇,桂耀庭. 中国肿瘤生物治疗杂志, 2011, 18(3)

大规模平行测序技术筛选人肾细胞癌组织中差异表达microRNAs及其验证 [点此下载全文](#)

[翟庆娜](#) [周亮](#) [余振东](#) [唐爱发](#) [王勇](#) [桂耀庭](#)

北京大学 深圳医院 检验科, 广东 深圳518036; 汕头大学医学院 临床检验诊断学教研室, 广东 汕头 515031; 北京大学 深圳医院 男性生殖与遗传学重点实验室, 广东 深圳518036; 北京大学 深圳医院 检验科, 广东 深圳518036; 北京大学 深圳医院 男性生殖与遗传学重点实验室, 广东 深圳518036; 北京大学 深圳医院 男性生殖与遗传学重点实验室, 广东 深圳518036; 北京大学 深圳医院 男性生殖与遗传学重点实验室, 广东 深圳518036

**基金项目:** 国家自然科学基金资助项目 (No. 30900817); 深港创新圈项目资助 (No. ZYB200907080110A)

DOI:

**摘要:**

目的: 以大规模平行测序技术 (massively parallel signature sequencing, MPSS) 筛选人肾细胞癌 (renal cell carcinoma, RCC) 和癌旁组织中差异表达的microRNAs (miRNAs), 并验证差异表达miRNAs之一的miR-660在人RCC中的表达。方法: MPSS检测10例RCC组织及相应癌旁组织中miRNAs的表达, 筛选RCC组织中差异表达miRNAs。RT-PCR检测5例RCC与癌旁组织中miR-660的表达, qPCR检测40例RCC与癌旁组织中miR-660的表达。结果: MPSS结果显示, RCC组织中283个miRNAs表达下调, 187个表达上调, 其中miR-660在RCC组织中表达量是癌旁组织的17.5%。RT-PCR初步验证了此结果; qPCR验证结果显示, 40例RCC组织中33例miR-660表达显著低于癌旁组织, RCC组织中miR-660平均表达量是癌旁的19.5%。结论: 人RCC组织中283个miRNAs表达下调、187个上调。miR-660在RCC组织中低表达, 有可能成为RCC诊断及治疗的新靶点。

**关键词:** [肾细胞癌](#) [microRNAs](#) [大规模平行测序技术](#) [miR-660](#)

Massively parallel signature sequencing in screening differentially expressed microRNAs in human renal cell carcinoma tissues and their identification [Download Fulltext](#)

[ZHAI Qing-na](#) [ZHOU Liang](#) [YU Zhen-dong](#) [TANG Ai-fa](#) [WANG Yong](#) [GUI Yao-ting](#)

Department of Clinical Laboratory, Shenzhen Hospital of Peking University, Shenzhen 518036, Guangdong, China; Department of Clinical Laboratory Diagnostics, Shantou University Medical College, Shantou 515031, Guangdong, China; Key Laboratory of Male Reproductive Medicine and Genetics in Guangdong, Shenzhen Hospital of Peking University, Shenzhen 518036, Guangdong, China; Department of Clinical Laboratory, Shenzhen Hospital of Peking University, Shenzhen 518036, Guangdong, China; Key Laboratory of Male Reproductive Medicine and Genetics in Guangdong, Shenzhen Hospital of Peking University, Shenzhen 518036, Guangdong, China; Key Laboratory of Male Reproductive Medicine and Genetics in Guangdong, Shenzhen Hospital of Peking University, Shenzhen 518036, Guangdong, China; Key Laboratory of Male Reproductive Medicine and Genetics in Guangdong, Shenzhen Hospital of Peking University, Shenzhen 518036, Guangdong, China

Fund Project: Project supported by the National Natural Science Foundation of China (No. 900817), and the Shenzhen-HongKong Innovation Circle Project (No. ZYB200907080110A)

**Abstract:**

Objective: To screen differentially expressed microRNAs (miRNAs) in tumor and the corresponding paracancerous tissues of renal cell carcinoma (RCC) by massively parallel signature sequencing (MPSS), and to identify the expression of miR-660 in RCC. Methods: The expression of miRNAs in tumor and the corresponding paracancerous tissues of 10 RCC patients was examined by MPSS, and the differentially expressed miRNAs were screened. Expression of miR-660 in tumor tissues of 5 patients and the paracancerous tissues of 40 RCC patients were further examined by RT-PCR and qPCR, respectively. Results: The MPSS results showed that 283 miRNAs were up-regulated and 187 were down-regulated in RCC tissues, and the expression level of miR-660 in RCC tissues was only 19.5% of that in the paracancerous tissues. The MPSS results were primarily confirmed by RT-PCR, and qPCR results further showed that miR-660 expression in 34 of 40 RCC tissues was significantly lower than that in the paracancerous tissues, with the average level being only 11.7% of that in the paracancerous tissues. Conclusion: A total of 283 miRNAs are up-regulated and 187 down-regulated in RCC tissues; and miR-660 is lowly expressed in RCC, which may be a new target for the diagnosis and treatment of RCC.

Keywords: [renal cell carcinoma](#) [microRNA](#) [massively parallel signature sequencing \(MPSS\)](#) [miR-660](#)

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

Copyright © Biother.Org™ All Rights Reserved

主管单位: 中国科学技术协会 主办单位: 中国免疫学会、中国抗癌学会

地址: 上海市杨浦区翔殷路800号 邮政编码: 200433 京ICP备06011393号-2

本系统由北京勤云科技发展有限公司设计