

Accepted Manuscript

miR-320a regulates cell proliferation and apoptosis in multiple myeloma by targeting pre-B-cell leukemia transcription factor 3

Yinghao Lu, Depei Wu, Jishi Wang, Yan Li, Xiao Chai, Qian Kang



PII: S0006-291X(16)30571-X

DOI: [10.1016/j.bbrc.2016.04.069](https://doi.org/10.1016/j.bbrc.2016.04.069)

Reference: YBBRC 35664

To appear in: *Biochemical and Biophysical Research Communications*

Received Date: 11 April 2016

Accepted Date: 13 April 2016

Please cite this article as: Y. Lu, D. Wu, J. Wang, Y. Li, X. Chai, Q. Kang, miR-320a regulates cell proliferation and apoptosis in multiple myeloma by targeting pre-B-cell leukemia transcription factor 3, *Biochemical and Biophysical Research Communications* (2016), doi: 10.1016/j.bbrc.2016.04.069.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

miR-320a regulates cell proliferation and apoptosis in multiple myeloma by targeting pre-B-cell leukemia transcription factor 3

Yinghao Lu^{1,2}, Depei Wu^{1*}, Jishi Wang^{2*}, Yan Li², Xiao Chai², Qian Kang²

1 Jiangsu Institute of Hematology, First Affiliated Hospital of Soochow University, Key Laboratory of Thrombosis and Hemostasis under Ministry of Health, Collaborative Innovation Center Of Hematology, Suzhou, 215006, China.

2 Department of Hematology, Affiliated Hospital of Guiyang Medical College, the hematopoietic stem cell transplant center of Guizhou Province, Blood Diseases Diagnosis and Treatment Center of Guizhou Province, Guiyang, 550004, Guizhou Province, China.

*Corresponding author: Depei Wu, Jiangsu Institute of Hematology, First Affiliated Hospital of Soochow University, Key Laboratory of Thrombosis and Hemostasis under Ministry of Health, Collaborative Innovation Center Of Hematology, Suzhou, 215006, China. Email address: wudepei@medmail.com.cn.

Jishi Wang, Department of Hematology Affiliated Hospital of Guiyang Medical College, the hematopoietic stem cell transplant center of Guizhou Province, Blood Diseases Diagnosis and Treatment Center of Guizhou Province, Guiyang, 550004, Guizhou Province, China. Email address: lgyhlhlyh@aliyun.com.

Abstract

Aberrant expression of microRNAs (miRNAs) is implicated in cancer development and progression. While miR-320a is reported to be deregulated in many malignancy types, its biological role in multiple myeloma (MM) remains unclear. Here, we observed reduced expression of miR-320a in MM samples and cell lines. Ectopic expression of miR-320a dramatically suppressed cell viability and clonogenicity and induced apoptosis *in vitro*. Mechanistic investigation led to the identification of Pre-B-cell leukemia transcription factor 3 (PBX3) as a novel and direct downstream target of miR-320a. Interestingly, reintroduction of PBX3 abrogated

Download English Version:

<https://daneshyari.com/en/article/10748524>

Download Persian Version:

<https://daneshyari.com/article/10748524>

[Daneshyari.com](https://daneshyari.com)