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PII: S0171-9335(17)30298-4
DOI: https://doi.org/10.1016/j.ejcb.2018.02.001
Reference: EJCB 50994

To appear in:

Received date: 17-11-2017
Revised date: 6-2-2018
Accepted date: 6-2-2018

Please cite this article as: wang, Hui, Ding, Xie-Gang, Yang, Jin-Jian, Li, Shi-wen, Zheng, Hang, Gu, Chao-Hui, Jia, Zhan-Kui, Li, Lu, LncRNA MIAT facilitated BM-MSCs differentiation into endothelial cells and restored erectile dysfunction via targeting miR-200a in a rat model of erectile dysfunction.European Journal of Cell Biology https://doi.org/10.1016/j.ejcb.2018.02.001

LncRNA MIAT facilitated BM-MSCs differentiation into endothelial cells and restored erectile dysfunction via targeting miR-200a in a rat model of erectile dysfunction

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Running title: the underlying role of LncRNA MIAT in ED

Abstract

Background Bone-marrow derived mesenchymal stem cells (BM-MSCs) implantation effectively restored rats' erectile dysfunction (ED). Long noncoding RNA (LncRNA)-myocardial infarction-associated transcript (MIAT) has been reported to play an important role in regulating endothelial cells (ECs) function via vascular endothelial growth factor (VEGF) that induced BM-MSCs differentiation into ECs. However, the molecular functions and biological roles of lncRNA MIAT in ED remained unclear.

Methods The rat model of ED was established. Quantitative real-time PCR (qRT-PCR) and