Author's Accepted Manuscript

Rosuvastatin improves myocardial Hypertrophy hemodynamic after Pressure overload regulating the Crosstalk of Nrf2/ARE and TGF-β/ Smads Pathways in Rat Heart

Pengbo Wang, Lin Luo, Qiusheng Shen, Gaoyong Shi, Anaz Mohammed, Songshi Ni, Xiang Wu



ww.elsevier.com/locate/eiphar

PII: S0014-2999(17)30796-3

https://doi.org/10.1016/j.ejphar.2017.12.013 DOI:

Reference: EJP71560

To appear in: European Journal of Pharmacology

Received date: 15 June 2017 Revised date: 7 November 2017 Accepted date: 6 December 2017

Cite this article as: Pengbo Wang, Lin Luo, Qiusheng Shen, Gaoyong Shi, Anaz Mohammed, Songshi Ni and Xiang Wu, Rosuvastatin improves myocardial Hypertrophy after hemodynamic Pressure overload via regulating the Crosstalk of Nrf2/ARE and TGF-β/ Smads Pathways in Rat Heart, European Journal of Pharmacology, https://doi.org/10.1016/j.ejphar.2017.12.013

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 galley proof before it is published in its final citable 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.

ACCEPTED MANUSCRIPT

Rosuvastatin improves myocardial Hypertrophy after hemodynamic Pressure overload via regulating the Crosstalk of Nrf2/ARE and TGF- β / Smads Pathways in Rat Heart

Pengbo Wang ^{1,2,#}, Lin Luo ^{3,#}, Qiusheng Shen ⁴, Gaoyong Shi³, Anaz Mohammed ¹, Songshi Ni^{2*}, Xiang Wu^{2*}

- 1. Affiliated hospital of Nantong University, Nantong, Jiangsu, China
- 2. Medical School of Nantong University, Nantong, Jiangsu, China
- 3. School of Pharmacy, Nantong University, Nantong, Jiangsu, China
- 4. Changshu traditional Chinese medical hospital, Changshu, Jiangsu, China
- # The author contributed equally to this work.

*Corresponding authors: Xiang Wu, Affiliated hospital of Nantong University, Nantong 226001, PR China. Tel: +0086-(0)513-81161301. E-mail: wuxiang@medmail.com.cn Songshi Ni, Affiliated hospital of Nantong University, Nantong 226001, PR China. Tel: +0086-(0)513-81161606. E-mail: jsntnss@163.com

ABSTRACT

Left ventricular hypertrophy is more commonly associated with hemodynamic overload imposed by hypertension or volume overload. Transforming growth factor β (TGF- β) is involved in the cardiac hypertrophy and fibrosis of the left ventricle. The fact that TGF- β 1 and the nuclear factor erythroid 2-related factor 2 (Nrf2) both become up-regulated upon persistent vessel overload suggests that these two factors may virtually impact on their signaling pathways. In this research, 40 rats were divided into sham group, model group, rosuvastatin low and high dose group. Rat models were established by incomplete constriction of abdominal aorta. After five weeks treatment, blood pressure, heart mass index (HMI), hemodynamic parameters and the average

Download English Version:

https://daneshyari.com/en/article/8529514

Download Persian Version:

https://daneshyari.com/article/8529514

<u>Daneshyari.com</u>