

Accepted Manuscript

Title: 1,25-Dihydroxyvitamin-D3 prevents the development of diabetic cardiomyopathy in type 1 diabetic rats by enhancing autophagy via inhibiting the β -catenin/TCF4/GSK-3 β /mTOR pathway

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PII: S0960-0760(17)30041-9
DOI: <http://dx.doi.org/doi:10.1016/j.jsbmb.2017.02.007>
Reference: SBMB 4887

To appear in: *Journal of Steroid Biochemistry & Molecular Biology*

Received date: 4-11-2016
Revised date: 9-2-2017
Accepted date: 9-2-2017

Please cite this article as: Huili Wei, Hua Qu, Hang Wang, Baolan Ji, Yao Ding, Dan Liu, Yang Duan, Huimin Liang, Chuan Peng, Xiaoqiu Xiao, Huacong Deng, 1,25-Dihydroxyvitamin-D3 prevents the development of diabetic cardiomyopathy in type 1 diabetic rats by enhancing autophagy via inhibiting the β -catenin/TCF4/GSK-3 β /mTOR pathway, *Journal of Steroid Biochemistry and Molecular Biology* <http://dx.doi.org/10.1016/j.jsbmb.2017.02.007>

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1, 25-Dihydroxyvitamin-D3 prevents the development of diabetic cardiomyopathy in type 1 diabetic rats by enhancing autophagy via inhibiting the β -catenin/TCF4/GSK-3 β /mTOR pathway

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Abbreviations: 1,25D3, 1,25-dihydroxyvitamin D3; VDR, vitamin D receptor; 25(OH)D, 25-dihydroxyvitamin D; DCM, diabetic cardiomyopathy; CQ, chloroquine; STZ, streptozotocin; lenti-shVDR, lentiviral vectors expressing a short hairpin RNA against VDR; TSC, tuberous sclerosis complex; TCF4, T-cell factor/lymphoid enhancer factor; GSK-3 β , glycogen synthase kinase-3 β ; mTOR, mammalian target of rapamycin; LiCl, lithium chloride; Baf, bafilomycin A1; BW, body weight; HW, heart weight; TL, tibia length; CVF, collagen volume fraction; PCA, perivascular collagen area; LA, luminal area; HR, Heart rate; SBP, systolic blood pressure; DBP, diastolic blood pressure; MAP, mean arterial pressure; GFP, green fluorescent protein; EF, ventricular ejection fraction; FS, fractional shortening; HG, high glucose.

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