## Accepted Manuscript

Title: Evidence for altered osteoclastogenesis in splenocyte cultures from *VDR* knockout mice

Authors: Daniel C. Reinke, Yolandi Starczak, Masakazu Kogawa, Kate R. Barratt, Howard A. Morris, Paul H. Anderson, Gerald J. Atkins

Biochemistry & Molecular Biology

Steroid

PII: S0960-0760(17)30198-X

DOI: http://dx.doi.org/doi:10.1016/j.jsbmb.2017.07.033

Reference: SBMB 4999

To appear in: Journal of Steroid Biochemistry & Molecular Biology

Received date: 4-5-2017 Revised date: 24-7-2017 Accepted date: 26-7-2017

Please cite this article as: Daniel C.Reinke, Yolandi Starczak, Masakazu Kogawa, Kate R.Barratt, Howard A.Morris, Paul H.Anderson, Gerald J.Atkins, Evidence for altered osteoclastogenesis in splenocyte cultures from VDR knockout mice, Journal of Steroid Biochemistry and Molecular Biologyhttp://dx.doi.org/10.1016/j.jsbmb.2017.07.033

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.

## ACCEPTED MANUSCRIPT

# Evidence for altered osteoclastogenesis in splenocyte cultures from $\ensuremath{\textit{VDR}}$

### knockout mice

Daniel C. Reinke<sup>a</sup>, Yolandi Starczak<sup>a,b</sup>, Masakazu Kogawa<sup>a</sup>, Kate R. Barratt<sup>b</sup>, Howard A. Morris<sup>b</sup>, Paul H. Anderson <sup>b,1</sup>, Gerald J. Atkins<sup>a,\*,1</sup>

<sup>a</sup>Biomedical Orthopaedic Research Group, Centre for Orthopaedic & Trauma Research, University of Adelaide, Australia

<sup>b</sup>School of Pharmacy and Medical Sciences, University of South Australia, Adelaide, SA 5005, Australia

\*Corresponding Author: Gerald J. Atkins PhD, Centre for Orthopaedic and Trauma Research, University of Adelaide, Adelaide, South Australia, 5005, Australia

Email: gerald.atkins@adelaide.edu.au

<sup>1</sup>co-senior author

### **Highlights:**

- Vitamin D receptor signalling in the osteoclast lineage is associated with negative regulation of activity
- VDRKO osteoclast-forming cultures expressed highly elevated *c-Fos*
- Osteoclast number and size from VDRKO splenocyte cultures were reduced compared to wild-type
- VDRKO osteoclast resorptive activity was increased on a per cell basis

### Download English Version:

# https://daneshyari.com/en/article/8337880

Download Persian Version:

https://daneshyari.com/article/8337880

<u>Daneshyari.com</u>