## Accepted Manuscript

Bone morphogenetic protein signaling through ACVR1 and BMPR1A negatively regulates bone mass along with alterations in bone composition

Ce Shi, Gurjit S Mandair, Honghao Zhang, Gloria G. Vanrenterghem, Ryan Ridella, Akira Takahashi, Yanshuai Zhang, David H. Kohn, Michael D Morris, Yuji Mishina, Hongchen Sun

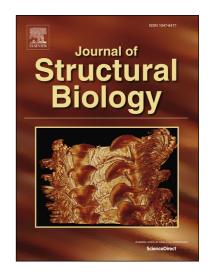
PII: S1047-8477(17)30207-1

DOI: https://doi.org/10.1016/j.jsb.2017.11.010

Reference: YJSBI 7127

To appear in: Journal of Structural Biology

Received Date: 25 October 2016 Revised Date: 21 November 2017 Accepted Date: 22 November 2017



Please cite this article as: Shi, C., Mandair, G.S., Zhang, H., Vanrenterghem, G.G., Ridella, R., Takahashi, A., Zhang, Y., Kohn, D.H., Morris, M.D., Mishina, Y., Sun, H., Bone morphogenetic protein signaling through ACVR1 and BMPR1A negatively regulates bone mass along with alterations in bone composition, *Journal of Structural Biology* (2017), doi: https://doi.org/10.1016/j.jsb.2017.11.010

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**

## **Title Page**

Bone morphogenetic protein signaling through ACVR1 and BMPR1A negatively regulates bone mass along with alterations in bone composition

Ce Shi <sup>a, b</sup>, Gurjit S Mandair <sup>b</sup>, Honghao Zhang <sup>b</sup>, Gloria G. Vanrenterghem <sup>b</sup>, Ryan Ridella <sup>c</sup>, Akira Takahashi <sup>b</sup>, Yanshuai Zhang <sup>b</sup>, David H. Kohn <sup>b, d</sup>, Michael D Morris <sup>c</sup>, Yuji Mishina <sup>b\*</sup>, Hongchen Sun <sup>a\*</sup>

<sup>a</sup> Department of Oral Pathology, School and Hospital of Stomatology, Jilin University; 1500 Qinghua Road, Changchun, 130000, China

<sup>b</sup> Department of Biologic and Materials Sciences, University of Michigan, School of Dentistry; 1011 N. University Avenue, Ann Arbor, MI 48109-1078, USA

<sup>c</sup> Department of Chemistry, University of Michigan; 930 N. University Avenue, Ann Arbor, MI 48108-1055, USA

<sup>d</sup> Biomedical Engineering College of Engineering, University of Michigan, MI 48109-2110, USA

E-mail address:

Ce Shi shice1004@gmail.com

Gurjit S Mandair gmandair@umich.edu

Honghao Zhang zhangho@umich.edu

#### Download English Version:

# https://daneshyari.com/en/article/8648235

Download Persian Version:

https://daneshyari.com/article/8648235

<u>Daneshyari.com</u>