

Supplementary materials

# Exploring the toxicity of Bismuth-asparagine coordination polymer in early development of zebrafish embryos

Ningning He<sup>†,¶</sup>, Xiang Li<sup>‡,¶</sup>, Daofu Feng<sup>‡</sup>, Rui Chen<sup>§</sup>, Tiehong Chen<sup>§</sup>, Dongyan

Chen<sup>†,\*</sup>, Xizeng Feng<sup>‡‡,\*</sup>

<sup>†</sup>The Key Laboratory of Animal Models and Degenerative Diseases, Department of Physiology, School of Medicine, Nankai University, Tianjin, 300071, China. E-mail:

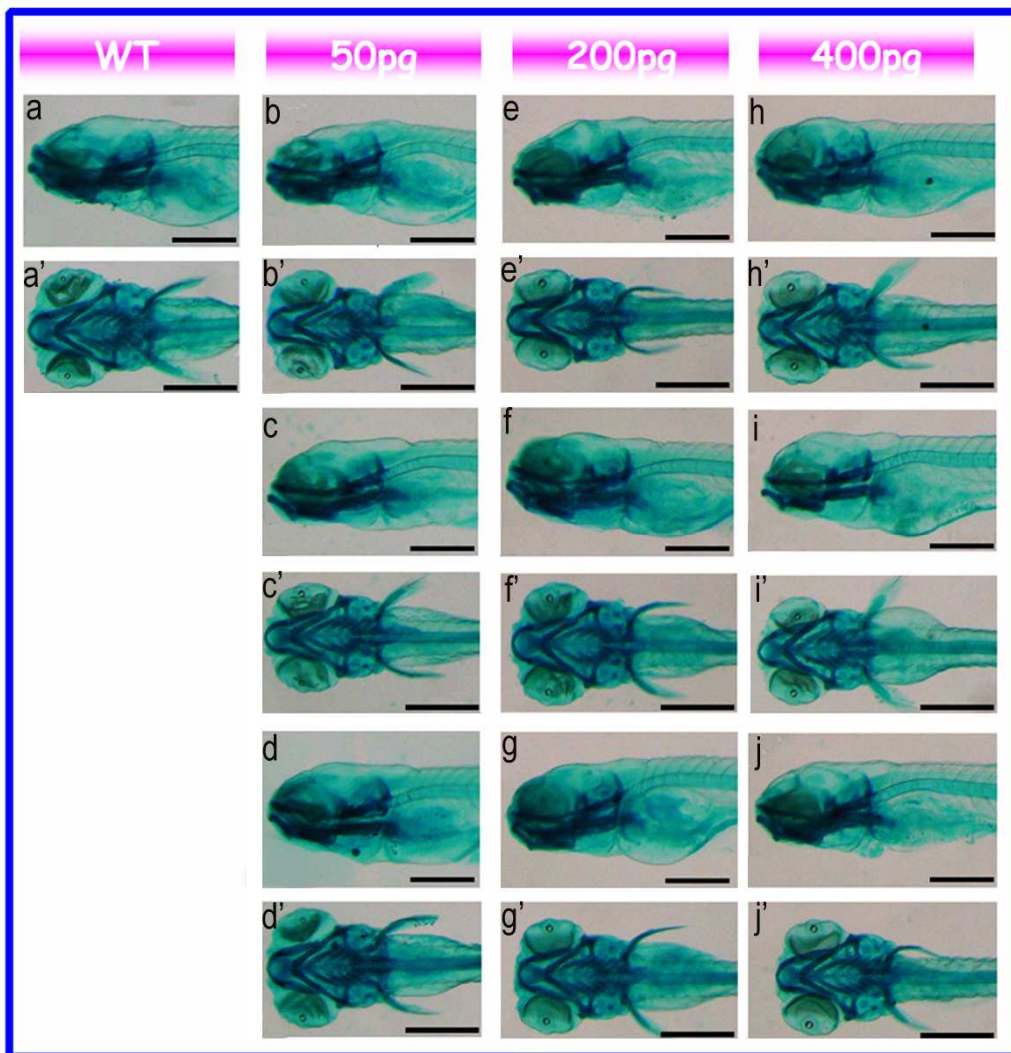
chendy@nankai.edu.cn

<sup>‡</sup>State Key Laboratory of Medicinal Chemical Biology, Key Laboratory of Bioactive Materials, Ministry of Education, College of Life Science, Nankai University, Tianjin 300071, P R China. Fax/ Tel: +86 22 23507022, E-mail: xzfeng@nankai.edu.cn

<sup>§</sup>Institute of New Catalytic Materials Science, Key Laboratory of Advanced Energy Materials Chemistry (MOE), College of Chemistry, Nankai University, Tianjin 300071, PR China.

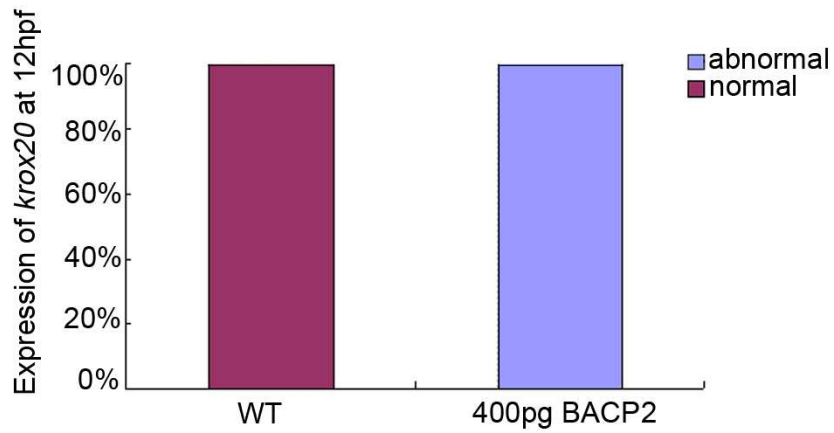
<sup>¶</sup>These authors equally contributed to this work.

1. The effect of BACP-2 at different concentration on cartilage development.



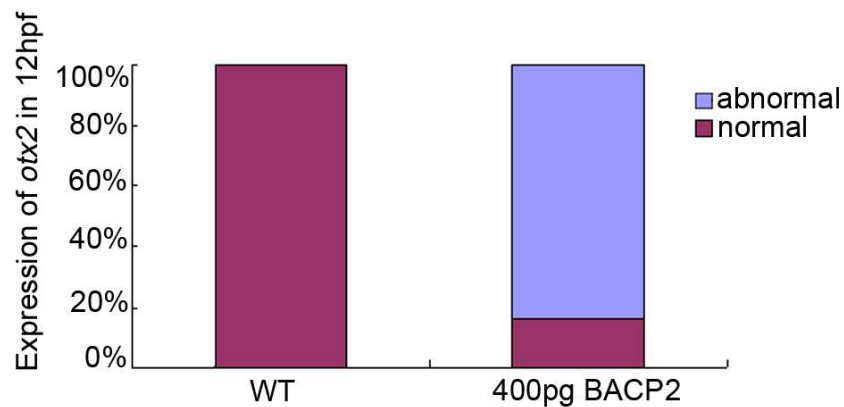
**Figure S1.** The cartilage development of embryos injected with 0 pg, 50 pg, 200pg and 400 pg BACP-2 at 5dpf. A-L, showing the lateral view. A'-L', showing the ventral view. Scale bars, 500 $\mu$ m.

**2. Statistical analysis of expression of *krox20* in wild-type embryos and 400 pg BACP-2 injected embryos.**



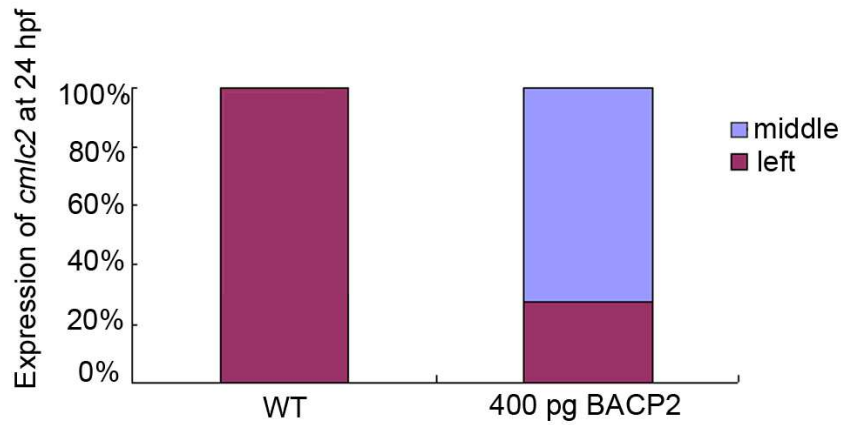
**Figure S2.** The percentages of different expression patterns of *krox20* in wild-type embryos and 400 pg BACP-2 injected embryos at 12 hpf.

**3. Statistical analysis of expression of *Otx2* in wild-type embryos and 400 pg BACP-2 injected embryos.**



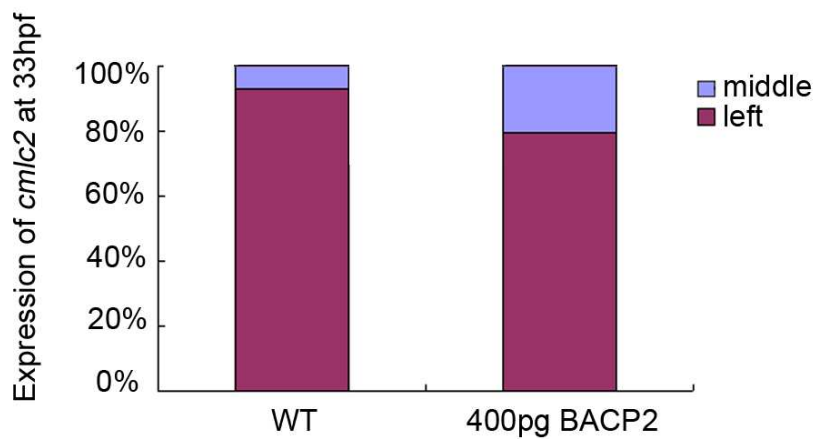
**Figure S3.** The percentages of different expression patterns of *Otx2* in wild-type embryos and 400 pg BACP-2 injected embryos at 12 hpf.

**4. Statistical analysis of expression of *cmlc2* in wild-type embryos and 400 pg BACP-2 injected embryos at 24 hpf.**



**Figure S4.** The percentages of different expression patterns of *cmlc2* in wild-type embryos and 400 pg BACP-2 injected embryos at 24 hpf.

**5. Statistical analysis of expression of *cmlc2* in wild-type embryos and 400 pg BACP-2 injected embryos at 33 hpf.**



**Figure S5.** The percentages of different expression patterns of *cmlc2* in wild-type embryos and 400 pg BACP-2 injected embryos at 33 hpf.